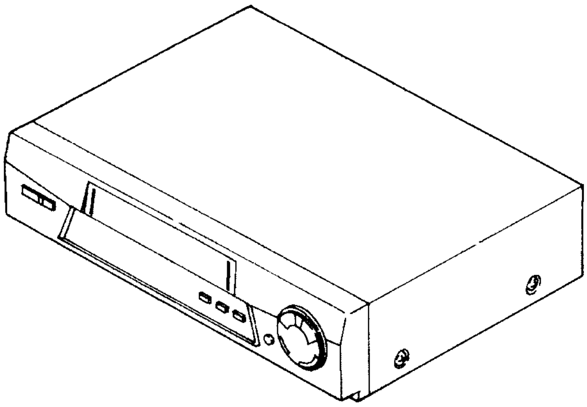
ORDER NO. VRD0002003C2

Service Manual

Video Cassette Recorder

Panasonic VHS
PAL
Hi-Fi HQ

NV-FJ603EL/EP/EPY
NV-FJ604EG/ECM
NV-FJ606EG/EGY/EC/ECM
NV-FJ610EG/EGY/B/EC/ECM/ECY/BL
NV-FJ611B
Z-MECHANISM



SPECIFICATIONS

ITEM	SPECIFICATION	
POWER	SOURCE : 220 – 240 V, 50 / 60 Hz	
	CONSUMPTION : 21 watts	
RECORDING SYSTEM	2 rotary heads, helical scanning system	
	PAL	
TV TUNER SYSTEM	NV-FJ603EL NV-FJ604EG NV-FJ606EG/ EGY NV-FJ610EG/ EGY	VHF : CH E2 – CH E12 CH A – CH H2 [ITALY] 75 Ω unbalanced UHF : CH 21 – CH 69 75 Ω unbalanced CATV: CH S01 – CH S41 75 Ω unbalanced
	NV-FJ603EP/ EPY NV-FJ604ECM NV-FJ606EC/ ECM NV-FJ610EC/ ECM/ECY	VHF: CH E2 – CH E12 75 Ω unbalanced UHF: CH 21– CH 69 75 Ω unbalanced CATV: CH S1 – CH S3 CH M1 CH U10 CH S21 – CH S41 (8MHz Rester)
	NV-FJ610B NV-FJ611B	UHF : CH 21 – CH 68 75 Ω unbalanced
	NV-FJ610BL	VHF : CH A – CH J 75 Ω unbalanced UHF: CH 21 CH 69 75 Ω unbalanced CATV: 104 – 470M MHz 75 Ω unbalanced
RF OUT SYSTEM	Except B/BL	UHF : CH 21 - CH 69 71 ± 3 dBμ,75Ω close
	NV-FJ610B/BL NV-FJ611B	UHF: CH21 - CH68 71 ± 3 dBμ,75Ω close
VIDEO	HEADS : 4 rotary heads 1 pair for recording and playback (L-R heads) 1 pair for trick play (L'-R' heads)	

ITEM	SPECIFICATION
VIDEO	INPUT : EURO AV (AV1,AV2) Connector (21pin) 1.0Vp-p, 75Ω terminated VIDEO IN (AV3:FRONT) Connector 1.0 Vp-p, 75 Ω terminated
	OUTPUT: EURO AV (AV1,AV2) Connector (21 pin) 1.0 Vp-p, 75 Ω terminated
AUDIO	HEAD : 1 Stationary head (Normal Audio) 2 channels (Hi-Fi Sound- Stereo)
	INPUT : EURO AV (AV1,AV2) Connector (21 pin) –6 dBV (500 mV), More than 10 KΩ AUDIO IN (AV3:FRONT)Connector 6 dBV (500 mV), More than 10 KΩ
	OUTPUT :EURO AV (AV1,AV2) Connector (21 pin) –6dBV (500 mV), Less than 1 KΩ AUDIO OUT Connector (Phono type) 6 dBV (500 mV), Less than 1KΩ
TAPE FORMAT	VHS Cassette tape (Tape width 12.7 mm)
TAPE SPEED	SP : 23.39 mm/s LP : 11.7 mm/s Record / Playback Time : SP : 4 hours with 240 min. type tape (NV-E240) LP : 8 hours with 240 min. type tape (NV-E240) FF / REW Time : 60 seconds with 180 min. type tape (NV-E180)
OPERATING CONDITION	Temperature : 5 °C – 40 °C Humidity : 35 % – 80 %
DIMENSIONS	430 (W) X 87 (H) X 303 (D) mm
WEIGHT	3.9 kg
STANDARD ACCESSORIESES	1 pc. Remote Controller 1 pc. AC Mains Lead 1 pc. DIN-RF Cable 1 pc. Ferrite Core (NV-FJ610BL-S ONLY)

Weight and dimensions shown are approximate.
Specifications are subject to change without notice.

Panasonic

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⚠ WARNING

This service information is designed for experienced repair technicians only and is not designed for use by the general public. It does not contain warnings or cautions to advise non-technical individuals of potential dangers in attempting to service a product. Products powered by electricity should be serviced or repaired only by experienced professional technicians. Any attempt to service or repair the product or products dealt with in this service information by anyone else could result in serious injury or death.

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1 INTRODUCTION

This service manual contains technical information which will allow service personnels to understand and service for this model.

Section 1 presents you with technical know how for actual servicing and general information of features and controls, enabling you to become familiar with each function.

Section 2 presents to you mechanical and electrical adjustment information as well as disassembly and replacement procedures.

In the case of very common information relating to other models like mechanical adjustment, please refer to the appropriate service manual.

Section 3 contains block diagrams which provides you with information for checking and underatanding each circuit. Schematic diagrams which give you detailed information such as waveforms, voltage data, function etc and so on.

Section 4 contains exploded views and parts list.

Please place orders using the parts list and not the drawing reference numbers.

If the circuit is changed or modified, this information will be followed by supplementary service manual to be filed with original service manual.

Note 1 :

Adjustment procedures, Disassembly Procedures and Assembly Procedures for Mechanism Chassis are separate volume from this service manual.
Please refer to the service manual for Z-Mechanism Chassis. (Order No. VRD9802005C2)

Note 2 :

The Model No. is indicated on the Schematic Diagram and Circuit Board Diagrams as follows.

Model No.	FJ604EG-K	FJ606EG-K	FJ610EG-S/K	FJ606EGYK	FJ610EGYS/K	FJ610B-S/K	FJ611B-K
Indication Mark	(A)	(A)	(A)	(B)	(B)	(C)	(C)
Model No.	FJ604ECMK	FJ606EC-K	FJ606ECMK	FJ610EC-S/K	FJ610ECMS/K	FJ610ECYS/K	FJ610BL-S
Indication Mark	(D)	(D)	(D)	(D)	(D)	(E)	(F)
Model No.	FJ603EL-K	FJ603EP-K	FJ603EPYK				
Indication Mark	(G)	(H)	(J)				

2 GENERAL DESCRIPTIONS

2.1. SERVICE INFORMATION

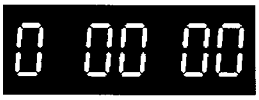
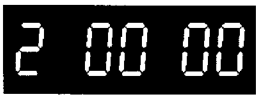
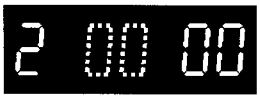
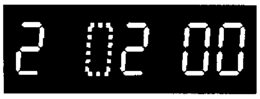
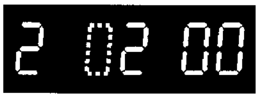
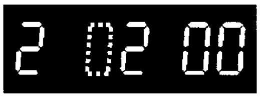
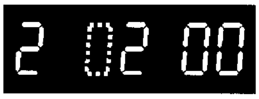
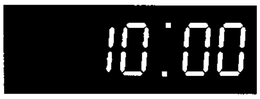
2.1.1. CHANNEL MEMORY IC INITIALIZATION

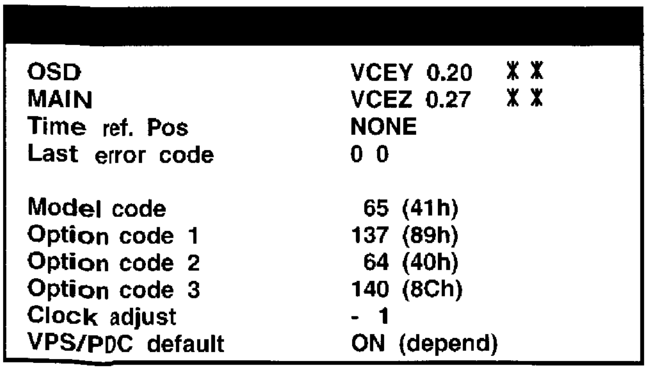
When replacing the Memory IC7704 and/or Oscillator X6001, Memory IC7704 has to be initialized due to the setting value changes.

Note:

1. **When replacing the memory IC7704, the OSD microprocessor IC7703 should be replaced together.**
2. It has to be performed before tuning.
3. Meaning of “MEMORY IC INITIALIZATION" is to make dependency in different models and to distinguish between different features.
4. It does not need to perform when replacing the System Control IC6001.

<CHANNEL MEMORY IC INITIALIZATION>

PROCEDURES	FIP Display	Monitor Screen
Press the FF and EJECT keys simultaneously for 3 seconds.		None
Press the FF and EJECT keys simultaneously more twice.		None
Press the EJECT key for 3 seconds.		None
Press the CH UP key twice.		None
Press the POWER key.	 (Colon starts flashing)	Service Screen (See Fig. S1 Service Screen (Sample))
Press the REC key on the Remote Controller Unit.		Service Screen (See Fig. S1 Service Screen (Sample))
Set the Model Code and Option Code by pressing 10-key or [RIGHT] [LEFT] [UP] [DOWN] keys on the Remote Controller Unit. (See Fig. S2)		Service Screen (See Fig. S1 Service Screen (Sample))
To release Service Mode, press POWER key and then press FF or turn the shuttle ring to the FF and press EJECT key simultaneously 6 times until the normal indication on the FIP.		None



OSD VCEY 0.20 X X
MAIN VCEZ 0.27 X X
Time ref. Pos NONE
Last error code 0 0

Model code 65 (41h)
Option code 1 137 (89h)
Option code 2 64 (40h)
Option code 3 140 (8Ch)
Clock adjust - 1
VPS/PDC default ON (depend)

Fig. S1 Service Screen (Sample)

Caution :

Since the “Clock adjust” and “VPS/PDC default” are future expansion, do not change the initial settings.

Just in case, if these initial setting values had been changed accidentally, it can be recovered by pressing [UP] [DOWN] keys on the Remote Controller.

Model No.	Suffix	Model Code	Option Code 1	Option Code 2	Option Code 3
NV-FJ603	EL-K	41	253	64	140
NV-FJ603	EP-K/EPYK	45	253	64	140
NV-FJ604	ECMK	45	141	64	140
NV-FJ604	EG-K	41	141	64	140

(To be continued on next page.)

Model No.	Suffix	Model Code	Option Code 1	Option Code 2	Option Code 3
NV-FJ606	EC-K/ECMK	45	141	64	140
NV-FJ606	EG-K/EGYK	41	141	64	140
NV-FJ610	B-K/B-S	49	161	64	140
NV-FJ610	BL-S	4D	161	64	140
NV-FJ610	EC-S/EC-K/ECMS/ECMK/ECYS/ECYK	45	137	64	140
NV-FJ610	EG-S/EG-K/EGYS/EGYK	41	137	64	140
NV-FJ611	B-K	49	165	64	140

Fig. S2 Model Code & Option Code

2.1.2. CAUTION FOR AUTO TUNING

PROCEDURE

Auto Tuning will start by the following procedure.

1. Connect the DIN-RF Cable.
2. Connect the AC Mains Lead.
3. Turn on the VCR.
   Auto Tuning will start.
   Auto Tuning searches for TV stations from VHF minimum to UHF maximum and memorizes every tuned program position. Other program positions are skipped.
   Auto Tuning takes five or more minutes to complete its search.
   Do not touch the VCR during Auto Tuning.
   Auto Tuning will stop halfway, if the VCR is operated or the aerial lead and/or the mains lead are disconnected.
   In case the VCR stopped during Auto Tuning, the VCR have to be reset and restarted. See the following item 2.

NOTE

1. If the VCR is turned on with the antenna not connected, all channels are skipped. Therefore, firmly connect the antenna and then turn the VCR off and on again to execute Auto tuning.
2. **When Auto Tuning is canceled halfway, Auto Tuning is not executed even if the VCR is turned off and then turned on again.**
   In this case, Auto Tuning have to be restarted by the following procedure.
   a. **Press EJECT and remove the Video cassette.**
   b. **Keep UP and DOWN on the VCR pressed simultaneously for 3 seconds or more during the VCR on.**
   The channel displayed on the VCR display disappears for a moment then changes to 2.
   c. **Turn off the VCR and then turn it on. Auto Tuning commences.**
3. If you turn the VCR off during Auto Tuning, Auto Tuning will stop halfway.
   The VCR should be reset and restarted by the item 2 in order to execute Auto Tuning.
4. If the VCR starts playback during Auto Tuning, Auto Tuning will stop halfway.
   The VCR should be reset and restarted by the item 2 in order to execute Auto Tuning.
5. To cancel Auto Tuning Mid-operation, press POWER during Auto Tuning (The VCR is turned off).
6. When the VCR is moved to the other area or country, TV broadcasts should be stored again.

2.1.3. CHECKING OF MAIN C.B.A.

When servicing the MAIN C.B.A., take out the MAIN C.B.A. and mechanism from the frame and turn over.

And then connect the Extension Cable (VFK2744) between the POWER C.B.A. connector (P1103) and the MAIN C.B.A. connector (P1001) as shown in Fig. S3.

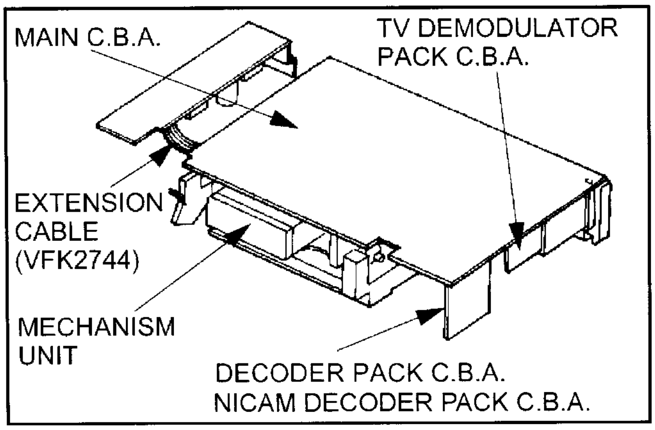

MAIN C.B.A.
TV DEMODULATOR PACK C.B.A.
EXTENSION CABLE (VFK2744)
MECHANISM UNIT
DECODER PACK C.B.A.
NICAM DECODER PACK C.B.A.

Fig. S3

2.1.4. REMOVAL OF CASSETTE TAPE

There are 2 ways to remove a cassette tape.

1. Removal of compulsory loading.
   a. Press FF and EJECT buttons simultaneously and set the Service Mode 7.
   b. Press STOP button in order to unload the mechanism. (Pay an attention of tape slack)
   Service Mode Indication:
   7 ** ** (STOP) → 7 00 ** (EJECT)
2. Removal of manual operation of Main cam gear.
   a. Disconnect the AC power cord and remove Top Panel.
   b. Rotate Main Cam Gear to the clockwise and unload the mechanism (Tape is remaining) (Fig. S4).

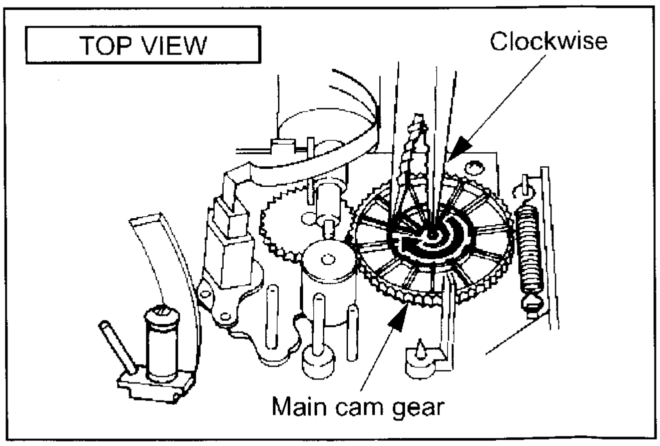


Fig. S4

   c. Rotate the Pole of Capstan motor to the clockwise the from the bottom in order to remove the tape slag.

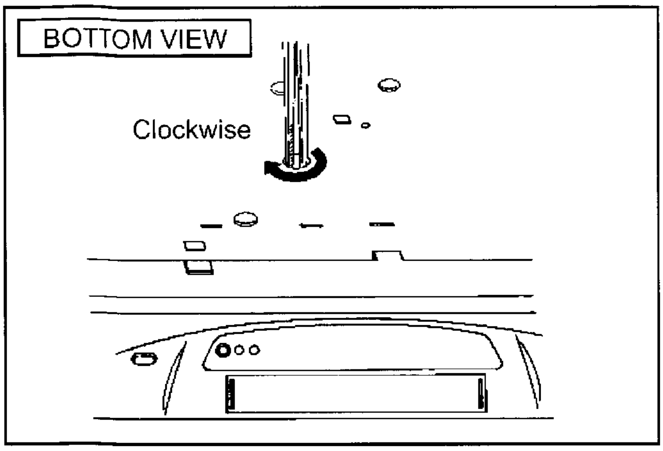

BOTTOM VIEW
Clockwise

Fig. S5

d. Rotate Main Cam Gear to the clockwise in order to eject the cassette tape.

2.1.5. CYLINDER UNIT REPLACEMENT

1. CYLINDER UNIT REPLACEMENT
   a. Remove the Mechanism unit from MAIN C.B.A./Chassis by referring “SECTION 2.Disassembly Procedure”.
   b. Remove the 3 screws (A) of the CYLINDER UNIT with a screw driver.
   c. Unlock the 4 locking tabs (B) and disconnect the Cylinder flexible card from the FPC Holder.
   d. Remove the CYLINDER UNIT.

CAUTION

Handle the Cylinder flexible card with care. When it damaged, you should replace whole Cylinder unit.

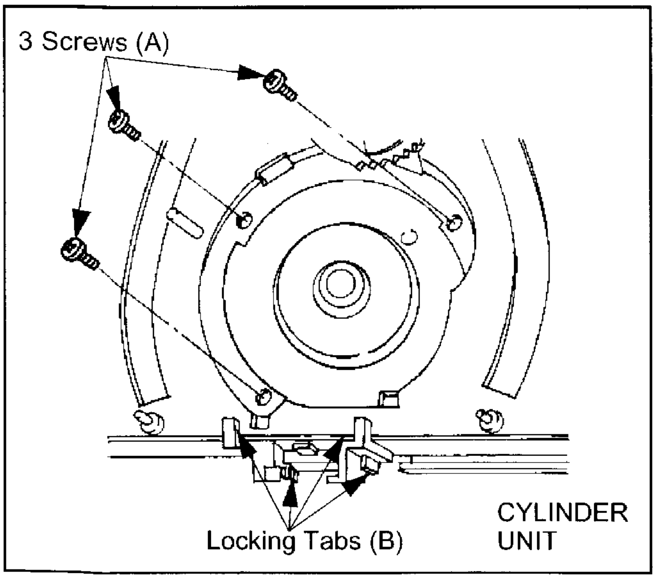

3 Screws (A)
Locking Tabs (B)
CYLINDER UNIT

Fig. S6

2. UPPER CYLINDER DISASSEMBLY
   a. Remove 2 screws (A).
   b. Remove the Cylinder Stator Unit.
   c. Remove 2 screws (B).
   d. Remove the Cylinder Rotor Unit.
   e. Loose Hex screw (C) (1.5 mm) and remove the CYLINDER RETAINER.
   f. Remove the Upper Cylinder.

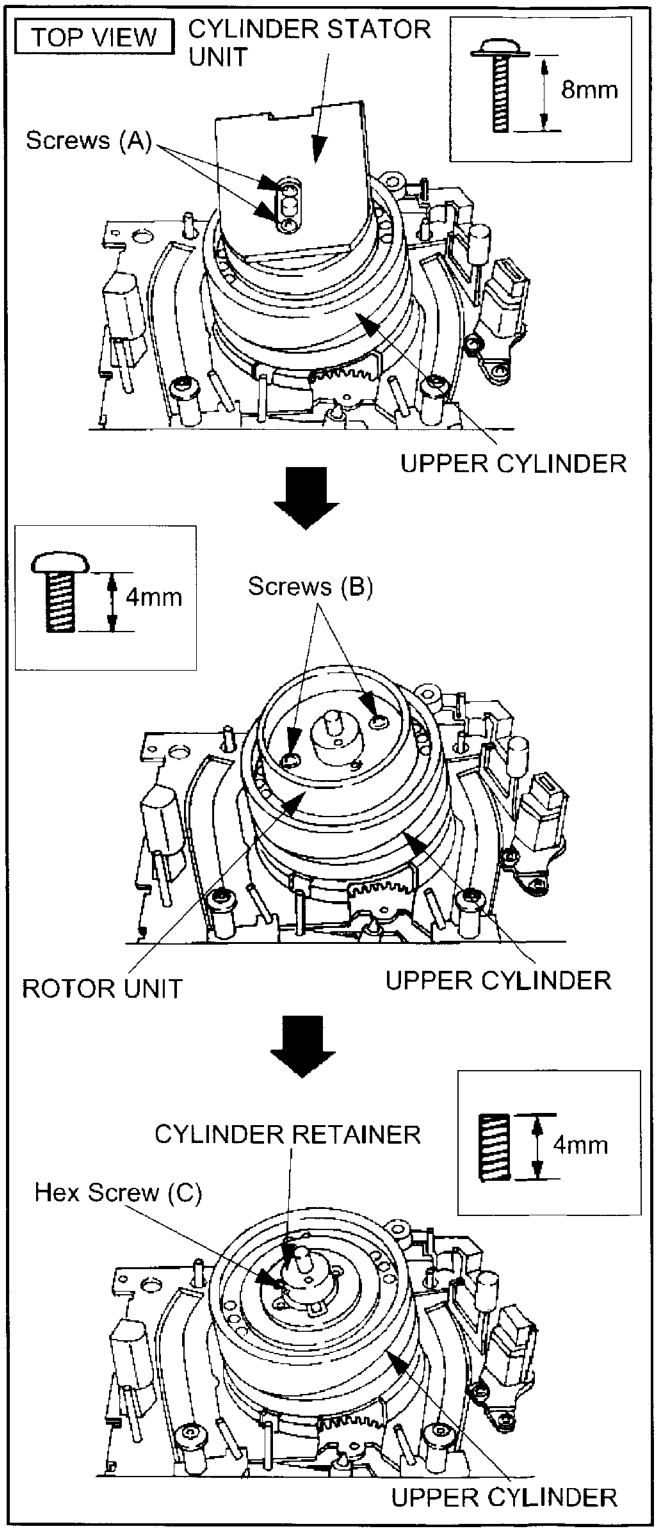

TOP VIEW
CYLINDER STATOR UNIT
Screws (A)
8mm
UPPER CYLINDER
4mm
Screws (B)
ROTOR UNIT
UPPER CYLINDER
CYLINDER RETAINER
4mm
Hex Screw (C)
UPPER CYLINDER

Fig. S7

3. UPPER CYLINDER ASSEMBLY

When reassembling, perform the steps in the reverse order.

Notes :

a. Install the Cylinder Retainer so that the 2 holes on top of the Cylinder Retainer are at right angles with the P3502 Connection.

b. Tighten the Hex screw (C) (1.5 mm) while pressing down on top of the Cylinder Retainer.

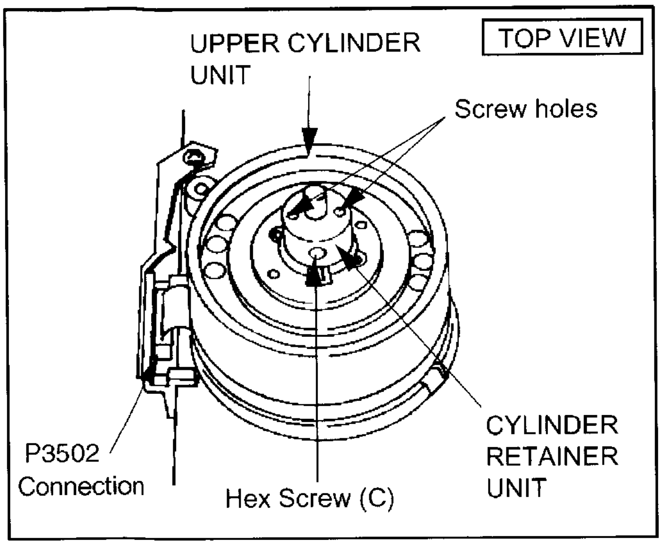

UPPER CYLINDER UNIT
TOP VIEW
Screw holes
P3502 Connection
Hex Screw (C)
CYLINDER RETAINER UNIT

Fig. S8

c. Install the Cylinder Rotor Unit so that the inner hole of the Cylinder Rotor Unit fits to the small projection (D) on top of the Upper Cylinder.

d. Tighten 2 screws (B).

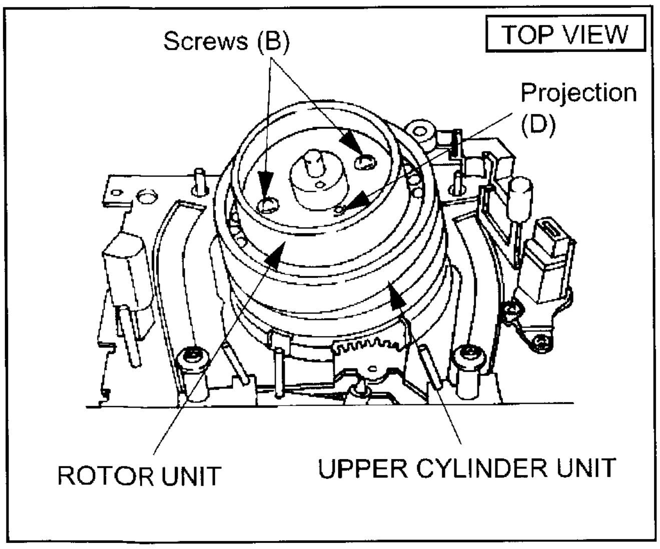

Screws (B)
TOP VIEW
Projection (D)
ROTOR UNIT
UPPER CYLINDER UNIT

Fig. S9

e. Install the Cylinder Stator Unit.

f. Tighten 2 screws (A).

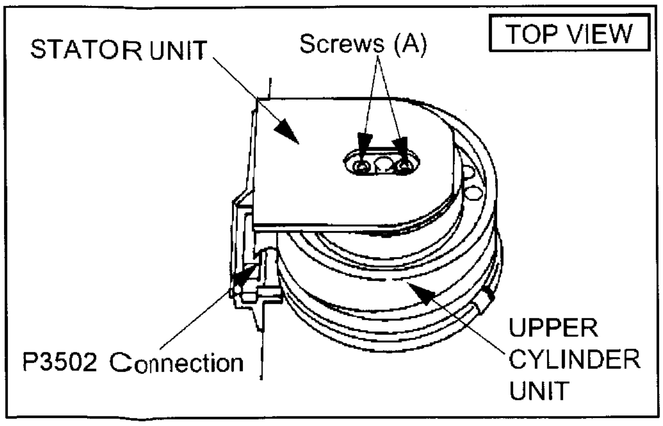

STATOR UNIT
Screws (A)
TOP VIEW
P3502 Connection
UPPER CYLINDER UNIT

Fig. S10

g. Confirm the PG SHIFTER ADJUSTMENT with the alignment tape (PAL : VFJ8125H3F) and adjust it if necessary.

2.1.6. FLAT CARD CABLE INSTALLATION

When installing the Flat Card Cable on the connector, install the Flat Card Cable with the cable contacts facing the connector contacts.

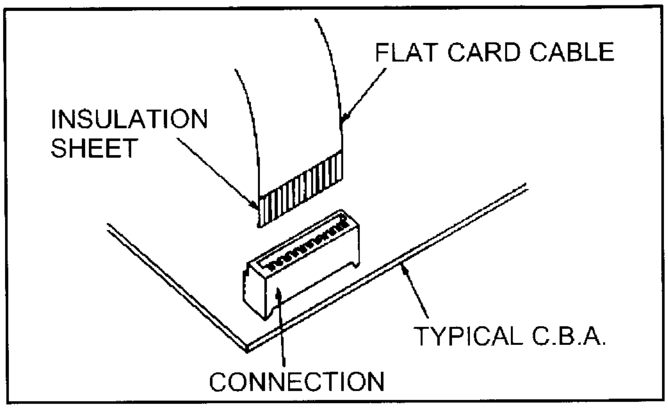

FLAT CARD CABLE
INSULATION SHEET
TYPICAL C.B.A.
CONNECTION

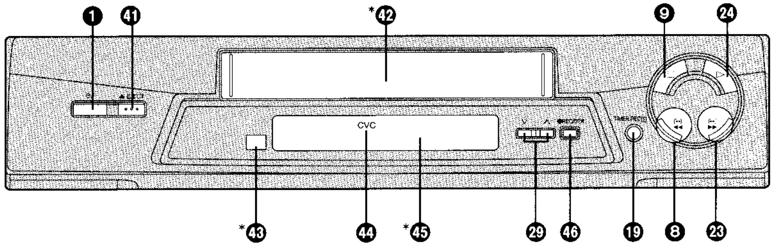
Fig. S11

2.2. SELF-TEST & SERVICE INFORMATION DISPLY

Refer to the Service Manual for Z Mechanism Chassis. (Order No.:VRD9802005C2)

Controls and Components

Keep this page open as you read through the Operating Instructions. Refer to it for the control and component names and numbers which appear in the text.


①
㊶
*㊷
⑨
㉔
CVC
TIMER REC
*㊸
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㉙
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⑲
⑧
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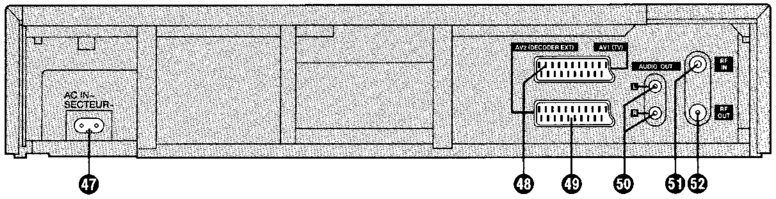
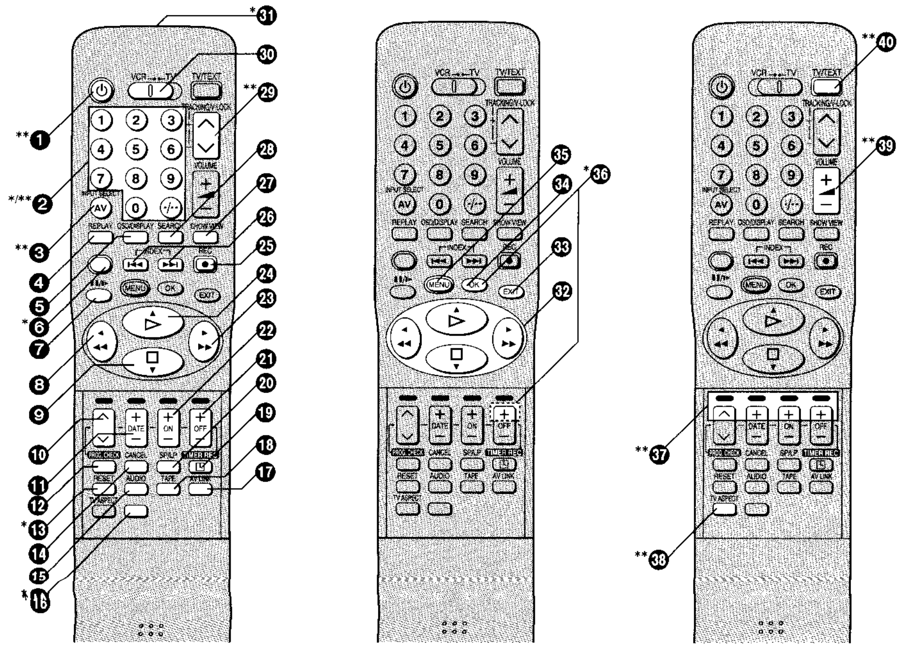

AC IN~
SECTEUR~
AV2 (DECODER EXT)
AV1 (TV)
AUDIO OUT
RF IN
RF OUT
㊼
㊽
㊾
㊿
(51)
(52)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**㊵
**㊴
VCR TV
TV/TEXT
TRACKING/V-LOCK
VOLUME
INPUT SELECT
AV
-/--
REPLAY
OSD/DISPLAY
SEARCH
SHOWVIEW
INDEX
REC
MENU
OK
EXIT
DATE
ON
OFF
PROG/CHECK
CANCEL
SP/LP
TIMER REC
RESET
AUDIO
TAPE
AV LINK
TV ASPECT

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* See page 4. (VCR Operation)

** See page 6. (TV Operation)

VCR Operation

When you want to operate the VCR, set the VCR/TV switch ㉚ to "VCR".

*② **Numeric buttons**

To select the programme positions (1–99) of the VCR.

Example:

9: ⑨

19: (-/--) → ① → ⑨

To enter a ShowView number.

To enter numbers for various settings.

*⑥ No function

*⑬ **Tape Counter Reset button**

To reset the tape counter (elapsed time) to "0:00.00".

- The tape counter is automatically reset to "0:00.00" when a video cassette is inserted.

*⑯ No function

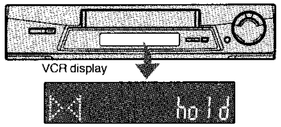
*㉛ **Infra-red transmitter**

*㊱ **Child Lock Function buttons**
(Convenient function to prevent unauthorized use)

This function deactivates all buttons on the VCR and the remote control. Use this function, when you do not want other people to operate the VCR.

To Activate the Child Lock Function:

1 Hold down the OK and the OFF (+) buttons ㊱ simultaneously until the "▷◁ hold" indication appears in the VCR display.
  - If you press a button while the Child Lock function is on, the "▷◁ hold" indication appears in the VCR display to inform you that no operation is possible.


VCR display
▷◁ hold

Indication when the Child Lock function is activated

To Cancel the Child Lock Function:

1 Hold down the OK and the OFF (+) buttons ㊱ simultaneously until the "▷◁ hold" indication disappears.
  - If you disconnect the power cable, the Child Lock function is automatically cancelled after the power backup time of approximately 60 minutes has elapsed.

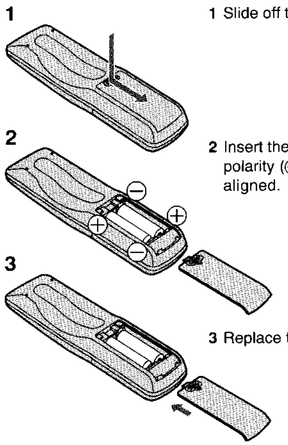
*㊷ **Cassette compartment**

*㊸ **Infra-red Remote Control Receiver window**

*㊺ **VCR display**

Preparing the Remote Control

Inserting Remote Control Batteries



1 Slide off the battery cover.

2 Insert the batteries with the polarity (⊕ and ⊖) correctly aligned.

3 Replace the battery cover.

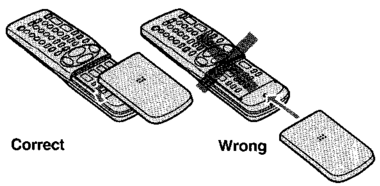
Notes for Battery Replacement:

- The service life of the batteries is approximately 1 year. However, it varies considerably depending on the frequency of use.
- When they are exhausted, replace them with two AA, UM3, or R6 size batteries.
- When the batteries are exhausted, remove them immediately and dispose of them correctly.
- Make sure that the batteries are inserted with the polarity (⊕ and ⊖) correctly aligned.
- Do not mix old battery with new battery.
- Do not mix different battery types, i.e. Alkaline and Manganese.
- Do not use rechargeable (Ni-Cd) batteries.
- Do not heat or short-circuit the batteries.
- When you do not use the remote control for a long time, take out the batteries and store them in a cool, dry place.

If the Sliding Cover of the Remote Control Becomes Detached

If the sliding cover of the remote control becomes detached accidentally, fit it securely in place by placing it on the top of the remote control at the position shown in the illustration below, and pushing it down until it clicks into position.

- It is not possible to fit the sliding cover in place by pushing or sliding it on from the bottom end of the remote control.


Correct
Wrong

Warning and Important Information

As this equipment gets hot during use, operate it in a well ventilated place; do not install this equipment in a confined space such as a book case or similar unit.

IMPORTANT

Your attention is drawn to the fact that the recording of pre-recorded tapes or discs or other published or broadcast material may infringe copyright laws.

WARNING

TO REDUCE THE RISK OF FIRE OR SHOCK HAZARD, DO NOT EXPOSE THIS EQUIPMENT TO RAIN OR MOISTURE.

FOR YOUR SAFETY

■ **DO NOT REMOVE OUTER COVER.**
To prevent electric shock, do not remove cover. There are no user serviceable parts inside. Refer all servicing to qualified service personnel.

Remarks

1. This VCR is also capable of receiving SECAM type broadcasting programmes (SECAM B/G) and recording/playing back its colour television signals.
2. When a cassette which has been recorded on this VCR is played back on a SECAM VCR, the picture may be reproduced in black and white. When it is played back on a PAL VCR without SECAM capability, the picture may not be reproduced in normal colour.
3. When cassettes recorded on a SECAM VCR or SECAM pre-recorded cassettes are played back on this VCR, the picture may be reproduced in black and white.
4. This VCR is not designed for use in France, where a SECAM VCR should be used instead.

Press the VCR-ON/OFF button ❶ to switch the VCR from on to standby mode or vice versa. In the standby mode, the VCR is still connected to the mains.

SHOWVIEW is a trademark of Gemstar Development Corporation. The SHOWVIEW system is manufactured under licence from Gemstar Development Corporation.

Setting the Remote Control to Operate Your TV

Only Panasonic TVs can be operated with the provided remote control.

The settings for operating the TV with the remote control have already been made.
No additional settings need to be performed.

However, some Panasonic TVs cannot be operated using this remote control.

TV Operation

The explanations below show you what functions individual buttons have when the VCR/TV switch ㉚ is set to "TV".

❶ **TV-ON/OFF button
To switch the TV on from standby mode (OFF) or vice versa.
On some TVs it is only possible to switch the TV to standby mode (OFF) with this button, but not on. In this case, try to turn the TV on with one of the following buttons:
Numeric buttons ❷
AV button ❸
Channel button ㉙

❷ **Numeric buttons
To select the programme positions (1–99) on the TV.

❸ **AV button
To select the desired AV input on the TV.

㉙ **Channel button
To select the desired programme position (TV station) on the TV.

㊲ **Teletext buttons
If your TV is equipped for Teletext reception, you can use these buttons to change the teletext information displayed on the screen and select desired information. For details, refer to your TV's operating instructions.

㊳ **TV ASPECT button
To switch the screen format between the wide-screen and other formats.

㊴ **VOLUME button
To adjust the volume of the TV.

㊵ **TV/TEXT button
To switch between normal TV mode and teletext mode.

The 3 Methods for Switching to the AV Input on Your Panasonic TV

Your Panasonic TV uses one of three different methods for switching between TV reception and the AV input(s). Perform the operations steps listed for the switching methods A, B and C below to determine which one your Panasonic TV uses.

A

1 Set the VCR/TV switch ㉚ to "TV".

2 Press the AV button ❸ to switch to the AV Input.
Each press of the AV button ❸ switches between "TV reception" and "AV Input(s)".

B

1 Set the VCR/TV switch ㉚ to "TV".

2 Press the AV button ❸.
Colour bars for selecting the AV Input appear on the TV screen.

3 Follow the instructions displayed on the TV screen to select the desired AV Input from the displayed colour bars for the AV Input by pressing the corresponding colour button ∧ (red) ❿, DATE+ (green) ⓫, ON+ (yellow) ㉒ or OFF+ (blue) ㉑ on the remote control.

C

1 Set the VCR/TV switch ㉚ to "TV".

2 Press the AV ❸ button.
The last previously selected AV Input indication appears on the TV screen. The indications for selecting another AV Input also appear,
but they disappear a few seconds later.

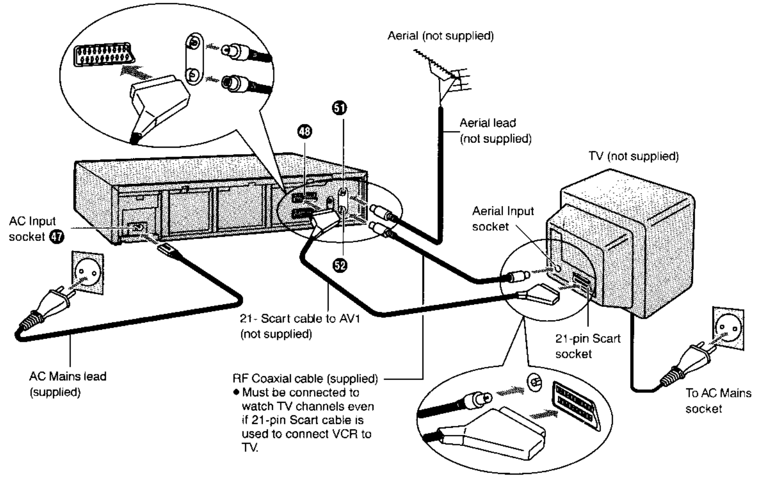
3 Before the indications for selecting another AV Input disappear, press the ∨ button ❿, DATE− button ⓫, ON− button ㉒ or OFF− button ㉑ to select the desired AV input.
With the following four buttons, you can move and select as follows:

∨ ❿:	Move left
DATE− ⓫:	Move down
ON− ㉒:	Move up
OFF− ㉑:	Move right

Connecting the VCR to a TV

Method 1.

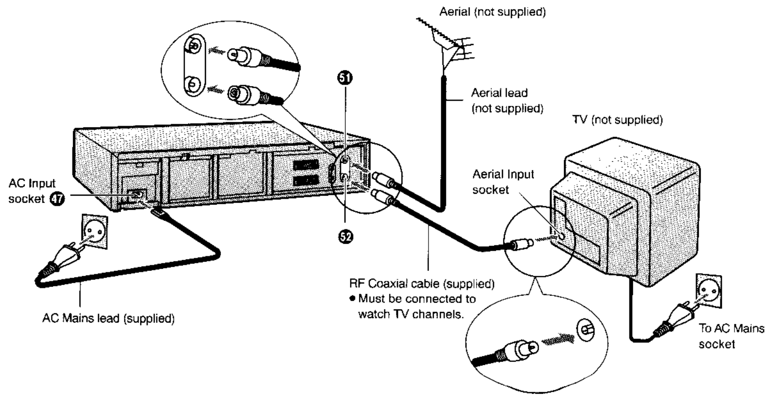
If you are connecting your VCR to a TV using RF coaxial cable and 21-pin Scart cable, then follow the steps below. (AV Connection)


Aerial (not supplied)
(51)
㊽
Aerial lead (not supplied)
TV (not supplied)
Aerial Input socket
AC Input socket ㊼
(52)
21-Scart cable to AV1 (not supplied)
21-pin Scart socket
AC Mains lead (supplied)
RF Coaxial cable (supplied)
• Must be connected to watch TV channels even if 21-pin Scart cable is used to connect VCR to TV.
To AC Mains socket

After completing the above connections, proceed to the Auto Setup page (Page 8).

or Method 2.

If you are connecting your VCR to a TV using only RF coaxial cable, then follow the steps below. (RF Connection)


Aerial (not supplied)
(51)
Aerial lead (not supplied)
TV (not supplied)
Aerial Input socket
AC Input socket ㊼
(52)
RF Coaxial cable (supplied)
• Must be connected to watch TV channels.
AC Mains lead (supplied)
To AC Mains socket

After completing the above connections, proceed to the Auto Setup page (Page 9).

If you are connecting your VCR to a TV using Method 1, follow the operations explained below.

Auto Setup Function

The Auto Setup function automatically tunes all available TV stations and sets the VCR's clock to the current date and time. If the tuning and time/date settings are not correct, performing timer recordings is not possible.

1 Switch the TV on.

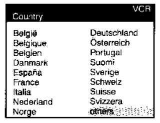
2 Select the AV input on your TV.

3 Set the VCR/TV switch ㉚ to "VCR".

4 Press the VCR-ON/OFF button ❶ to switch the VCR on. The Country setting menu appears on the TV screen.

5 Press the Cursor buttons (▲▼◀▶) ㉜ to select the country where you are using the VCR.

On Screen Display



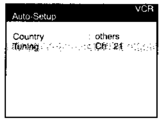
VCR

Country

België	Deutschland
Belgique	Österreich
Belgien	Portugal
Danmark	Suomi
España	Sverige
France	Schweiz
Italia	Suisse
Nederland	Svizzera
Norge	others

Menu for Country setting

6 Press the OK button ㉞ and the VCR's Auto Setup automatically starts and tunes all available TV stations and also sets the clock. This takes about 5 minutes.



VCR

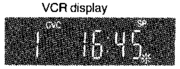
Auto-Setup

Country : others
Tuning : Ch 21

Indication during Auto Setup

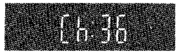
7 When the indication shown on the right appears on the VCR display, the Auto Setup is complete.

VCR display


CVC
SP
1 16:45

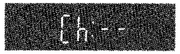
Indication when Auto Setup is complete

8 Press the MENU button ㉟ for more than 5 seconds so that the RF output channel number appears on the VCR display.
The initial setting is channel 36.



Indication when the RF output channel is 36 (example)

9 Press the Numeric button "0" ❷ so that the displayed RF output channel number changes to "– –".



Indication after changing the RF output channel to "– –"

10 Press the OK button ㉞ to conclude the setting.

◆ **To Cancel the Auto Setup Before It Has Finished**
Press the EXIT button ㉝.

Hint:

- If you select "Schweiz", "Suisse" or "Svizzera" on the Country setting menu, the Functions setting menu appears automatically to let you set the item "Power save" to "ON". In this setting, the VCR's power consumption is minimised when it is off (Standby mode). To turn the VCR on, keep the VCR-ON/OFF button ❶ pressed on the VCR main unit. It is not possible to turn it on with the remote control.

When the clock setting menu appears after Auto Setup has finished:

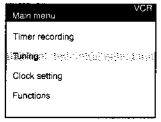
1 Press the Cursor buttons (▲▼◀▶) ㉜ to set the correct time and date.

2 Press the OK button ㉞ to conclude the setting.

To Confirm that the TV Stations Have Been Tuned Correctly by the Auto Setup Function

1 Press the MENU button ㉟ to display the OSD Main menu on the TV screen.

On Screen Display

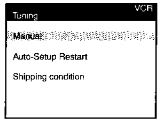


VCR

Main menu

Timer recording
Tuning
Clock setting
Functions

2 Press the Cursor buttons (▲▼) ㉜ to select "Tuning" and press the OK button ㉞ then select "Manual".

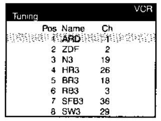


VCR

Tuning

Manual
Auto-Setup Restart
Shipping condition

3 Press the OK button ㉞ to display the list of tuned TV stations and confirm that all available TV stations have been set correctly.



VCR

Tuning

Pos	Name	Ch
1	ARD	1
2	ZDF	2
3	N3	19
4	HR3	26
5	BR3	18
6	RB3	3
7	SFB3	36
8	SW3	29

List of tuned TV stations (example)

4 Press the EXIT button ㉝ to exit the On Screen Display.

When the station names and/or channel numbers have not been set correctly:
See page 21 for details.

If you are connecting your VCR to a TV using Method 2, follow the operations explained below.

To be able to watch the VCR picture on the TV, RF connection requires the video playback channel to be set on the TV.

1 Switch the TV on.

2 Select an unoccupied programme position (which is not tuned to a TV station).
If you are using a Panasonic TV, select programme position "0".

3 Set the VCR/TV switch ㉚ to "VCR".

4 Press the VCR-ON/OFF button ❶ to switch the VCR on.

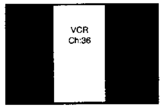
5 Press the MENU button ㉟ for more than 5 seconds.
The number of the RF output channel appears on the VCR display.
The initial setting is channel 36.

VCR display

Indication when the RF output channel is 36 (example)

6 Tune your TV until the test pattern shown on the right appears on the TV screen.
Now, the setting of the RF output channel is complete.
- As the tuning method differs depending on the TV you are using, refer to your TV's operating instructions for details about tuning.

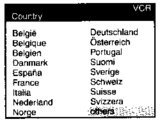
On Screen Display



Indication of the test pattern

7 Press the OK button ㉞.
The Country setting menu appears on the TV screen.

8 Press the Cursor buttons (▲▼◀▶) ㉜ to select the country where you are using the VCR.

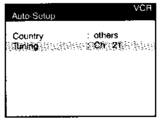


Country VCR

België Deutschland
Belgique Österreich
Belgien Portugal
Danmark Suomi
España Sverige
France Schweiz
Italia Suisse
Nederland Svizzera
Norge others

Menu for Country setting

9 Press the OK button ㉞ and the VCR's Auto Setup automatically starts and tunes all available TV stations and also sets the clock. This takes about 5 minutes.
- If you select "Schweiz", "Suisse" or "Svizzera" on the Country setting menu, see page 8.



Auto Setup VCR

Country : others
Tuning : Ch 21

Indication during Auto Setup

10 When the indication shown on the right appears on the VCR display, the Auto Setup is complete.

CVC
SP
1 16:45

Indication when Auto Setup is complete

◆ **To Cancel the Auto Setup Before It Has Finished**
Press the EXIT button ㉝.

When the clock setting menu appears after Auto Setup has finished:
See page 8.

To Confirm that the TV Stations Have Been Tuned Correctly by the Auto Setup Function

See page 8.

If the Picture on the TV's Video Playback Channel Is Distorted

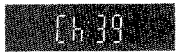
If, after setup, you select the video playback channel on the TV and view a TV programme on a programme position selected on the VCR, some interference may occur in certain cases. If this happens, you can minimise the distortion by changing the RF output channel on the VCR to another number. Follow the operations below.

1 Set the VCR/TV switch ㉚ to "VCR".

2 Press the MENU button ㉟ for more than 5 seconds.
The number of the RF output channel appears on the VCR display.
The initial setting is channel 36.

Indication when the RF output channel is 36 (example)

3 Press the numeric buttons ❷ to change the RF output channel.
Enter a channel number which differs by 2 or 3 from the one initially set number. For example, as the original number is 36, enter 39.



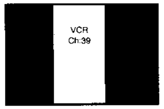
Indication after changing the RF output channel to 39 (example)

4 Press the OK button ㉞ to conclude the setting.

Note When You Have Changed the RF Output Channel:
After changing the RF output channel to a different number, be sure to retune your TV to the VCR's new RF output channel. (For details about tuning, refer to your TV's operating instructions.)

1 Press the MENU button ㉟ for more than 5 seconds.

2 When the test pattern shown on the right appears sharp and clear on the TV screen, the tuning is complete.



Test pattern indication

3 Press the EXIT button ㉝ to exit the On Screen Display.

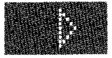
Playback

Preparations
- Confirm that the VCR is on.
- Confirm that the TV is on and the VCR viewing channel is selected.
- Insert a recorded video cassette.

For Normal Playback:

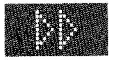
Press the Play button ㉔.

VCR display



For Cue Playback:

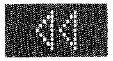
During playback, tap the Fast Forward button ㉓.



- To return to normal playback, press the Play button ㉔.
- If you press and hold down the Fast Forward button ㉓, cue playback continues for as long as you keep the button pressed.

For Review Playback:

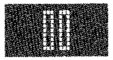
During playback, tap the Rewind button ❽.



- To return to normal playback, press the Play button ㉔.
- If you press and hold down the Rewind button ❽, review playback continues for as long as you keep the button pressed.

For Still Playback:

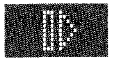
During playback, press the Pause/Slow button ❼.



- To return to normal playback, press the Play button ㉔ or the Pause/Slow button ❼.

For Slow Playback:

During playback, keep the Pause/Slow button ❼ pressed for 2 seconds or more.



- To return to normal playback, press the Play button ㉔.

Fast-forwarding or Rewinding the Tape:

To fast-forward the tape:
Press the Fast Forward button ㉓ in the stop mode.

To rewind the tape:
Press the Rewind button ❽ in the stop mode.

- To stop fast-forwarding or rewinding, press the Stop button ❾.
- To briefly view the picture during fast-forwarding or rewinding, press and hold down the corresponding button.

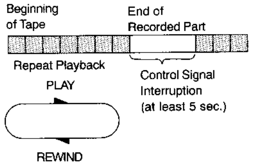
To Stop Playback

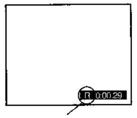
Press the Stop button ❾.

Notes:
- Cue, review or slow playback will be automatically cancelled after 10 minutes, and still playback after 5 minutes.
- During playback function other than normal playback, horizontal noise bars may appear in the picture, the colour of the picture may be unstable, or the picture may be otherwise distorted.
When you play back a tape recorded in the LP mode, the picture may be in black and white. However, these are not malfunctions.

To Play Back a Recorded Part Repeatedly

Press the Play button ㉔ on the remote control for more than 5 seconds.
The "R" indication appears on the On Screen Display.
- If "OSD" is set to "OFF" (See page 26), the "R" indication will not appear in repeat playback mode.





Indication of the Repeat Playback mode

To Cancel the Repeat Playback Mode:
Press the Stop button ❾.

To rewind the tape a little to view the same scene again (Replay Function)

If you want to view the same scene again, for example because you could not catch clearly what a person said, simply press the REPLAY button ❹, to rewind the tape a little from its present position and play it back again.
The direction in which the tape is rewound depends on what playback mode the VCR is in when you press the REPLAY button ❹.
- If you press the REPLAY button ❹ when the VCR is in the stop, rewind, fast-forward, slow playback, or standby (Off) mode, the Replay function does not work.

During Normal Playback, Cue Playback and Still Playback:
When you press the REPLAY button ❹, the VCR switches over to the review playback mode for a few seconds and then resumes normal playback.

During Review Playback:
When you press the REPLAY button ❹, the VCR briefly switches over to Cue playback and then plays back at normal speed in forward direction from the point where the REPLAY button ❹ was pressed.

Recording

To Stop Playback Automatically (Playback OffTimer Function)

If you set the playback duration, the playback will stop automatically.
After the set playback time has elapsed, the VCR automatically stops playback and switches off.

To Activate the Playback OffTimer Function:
During normal playback, press the Play button ㉔ on the VCR for more than 2 seconds to put the VCR in the Playback Off Timer mode.
After that, press the Play button ㉔ on the VCR repeatedly until the desired playback duration is displayed on the VCR display.

- Repeatedly pressing this button changes the indication in the following order:

Counter display (normal playback mode) → 30 (min.) → 60 (min.)
240 (min.) ← 180 (min.) ← 120 (min.)

To Stop Midway:
Press the Stop button ⑨.

To Play Back NTSC Video Cassettes on Your PAL TV (Quasi-NTSC Playback Function) (NV-FJ610 Series only)

This VCR allows playback of tapes recorded in the NTSC system on a normal PAL system TV with the same operations as usual.
On some TVs, however, the playback picture may roll up or down.

- If your TV has a V-HOLD control or equivalent adjustment function, use it to try to stop the picture movement.

Convenient Automatic Functions

VCR Auto Power On
When you insert a video cassette, the VCR switches on automatically.

Auto Playback Start
When you insert a video cassette with a broken erasure prevention tab, playback start automatically without having to press the Play button ㉔.

VCR-off Playback
When the VCR is off, an inserted cassette can be played back by pressing the Play button ㉔.

Auto Rewind
When the tape reaches the end, the VCR automatically rewinds it to the beginning.

- This function does not work during timer recording and OTR.

Automatic Switching Off and Ejection
When the VCR is switched off, and inserted cassette can be ejected simply by pressing the EJECT button ㊶. The VCR will eject the cassette and automatically turn itself off again.

VCR-off Search
When the VCR is off, the VCR starts intro-jet scan of an inserted cassette by pressing the SEARCH button ㉘.

To Eject the Video Cassette Using the Remote Controller

Keep pressing Stop button ⑨ for at least 3 seconds.

Preparations

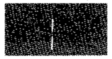
- Confirm that the VCR is on.
- Confirm that the TV is on and the VCR viewing channel is selected.
- Set the VCR/TV switch ㉚ to "VCR".

Operations

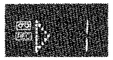
1 **Insert a video cassette with an intact erasure prevention tab.**
- If it has already been inserted, press the VCR-ON/OFF button ① to turn the VCR on.

2 **Select the TV station using the Channel buttons ㉙.**
- It is also possible to select by pressing the numeric buttons ②.

VCR display



3 **Press REC (REC/OTR) button ㉕ ((46)) to start recording.**

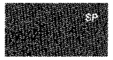


4 **Press the Stop button ⑨ to stop recording.**

To Select the Desired Tape Speed

Press the SP/LP button ⑳ before recording.

- SP provides standard recording time and optimum picture quality.
  LP provides doubled recording time with slightly reduced picture quality.



To Pause Recording

Press the Pause/Slow button ⑦ during recording.
Press again to continue recording.

To View One TV Programme while Recording Another TV Programme

After pressing the REC button ㉕ to start recording, select on your TV the programme position of the TV programme that you want to view.

Notes:

- When playing back an E300 cassette recorded in the LP mode, some picture distortion may occur. However, this is not a malfunction.
- The recording pause mode will be automatically cancelled after 5 minutes and return to the stop mode.

To Display the Approximate Remaining Tape Time

The remaining tape time can be displayed in the VCR display.

1 Press the TAPE button ⑱ and select the corresponding cassette tape length.
See page 26.

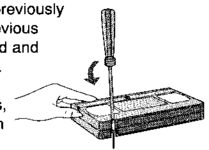
2 Press the OSD/DISPLAY button ⑤ repeatedly until the Remaining Tape Time appears on the VCR display.
- Pressing the OSD/DISPLAY button ⑤ once makes the On Screen Display appear; after that, pressing it repeatedly changes the indication in the following order:

→ Clock → Counter → Remaining Tape Time →

For certain cassettes, the remaining tape time may not be displayed correctly.

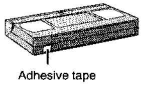
To Prevent Accidental Erasure of Recorded Contents

When you record again onto a previously recorded video cassette, the previous recording is automatically erased and replaced with the new recording. Therefore, to prevent accidental erasure of the recorded contents, break out the erasure prevention tab after recording.



Use a screwdriver or similar tool to break out the tab.

To Record Again onto the Video Cassette with a Broken Out Erasure Prevention Tab:
If you insert a video cassette with a broken out erasure prevention tab and press the REC button ㉕, the "▣" indication flashes on the VCR display to indicate that recording is not possible.
In this case, cover the tab hole with two layers of adhesive tape.
The adhesive tape substitutes for the prevention erasure tab and makes it possible to record again on this cassette.



To Select the Recording Duration and Perform Timer Recording (OTR Recording)

OTR means One-Touch Recording and is called this way, because you can start recording and select the recording duration by repeatedly pressing a single button. This is very convenient, for example when you want to start recording immediately but need to go out or want to go to bed.
After the selected recording duration has elapsed, recording stops and the VCR automatically switches off.

To Perform an OTR Recording:

1 Display the VCR picture on the TV.

2 Insert a video cassette with an intact erasure prevention tab.

3 Press the Channel buttons ㉙ to select the programme position on which the TV programme to be recorded will be broadcast.

4 Press the REC/OTR button (46) to start recording.

5 Press the REC/OTR button (46) repeatedly to select the desired recording duration.
- Every time you press this button, the recording duration indicated in the VCR display changes in the following order.
- For example, if you select "30", the VCR records a programme from that moment on for 30 minutes.

Counter display (normal recording mode) → 30 (min.) → 60 (min.)
240 (min.) ← 180 (min.) ← 120 (min.)

To Stop the OTR Recording Before the End:
Press the Stop button ⑨.

Linked Timer Recordings with a Digital Receiver

When the AV2 socket of this VCR is connected by a 21-pin cable to a Digital Receiver, it is possible to have timer recordings for a Digital Receiver execute automatically simply by switching the Digital Receiver into timer standby mode and then switching this VCR into timer recording standby mode.

- **Note that linked timer recordings may not work properly with some Digital Receivers.**

1 Make sure that "AV2" is set to "TIMER".
(See page 27.)

2 Insert a video cassette with an intact erasure prevention tab into the VCR.

3 Switch the Digital Receiver over to the timer standby mode.

4 Press the TIMER REC button ⑲ to switch the VCR over to the timer recording standby mode.
- This VCR does not require any further special timer recording operations.
- The recording will start at the date and time programmed for the Digital Receiver.

Notes:

- Always connect the Digital Receiver to be used for timer recordings to the AV2 socket of this VCR using a 21-pin cable.
- Linked timer recordings are not counted in the total time of timer recording programmings.
- Make sure that the date and time of the linked timer recording does not conflict with that of a VCR. If programmed recordings do overlap, either linked timer recording or timer recording of VCR have the priority.

Timer Recording

This function lets you programme the VCR for unattended automatic recording of desired TV programmes when you are not at home or sleeping.
You can programme timer recordings in two different ways:

- By entering the necessary information with the remote control while viewing the On Screen Display (OSD) on the TV screen (explained below) or;
- By entering the ShowView number published alongside the TV programme listings in newspapers and magazines (see page 14).

This VCR lets you programme up to 8 TV programmes (including weekly and daily programmes) for unattended recording up to one month in advance.

To Programme with the On Screen Display (OSD)

This method offers easy step-by-step programming with the remote control while you view the prompts on the TV screen.

Preparations

- Confirm that the VCR is on.
- Confirm that the TV is on and the VCR viewing channel is selected.
- Insert a video cassette with an intact erasure prevention tab.
- Set the VCR/TV switch ㉚ to "VCR".

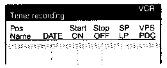
Example:
Programming the timer recording of a TV programme broadcast on programme position 2 (ZDF) from 20:00 to 21:30 on 27 October.

Follow the on screen operation guide.

Operations

1 **Press the PROG./CHECK button ⑫ to display the menu for programming timer recordings on the TV screen.**
- Alternatively, you can press the MENU button ㉟ and then select "Timer recording".

On Screen Display



Pos Name	DATE	Start ON	Stop OFF	SP LP	VPS PDC

2 **Press the Channel buttons ⑩ to select the programme position of the desired TV station.**
- As an alternative method, after pressing the Channel button ⑩, you can use the Cursor (▲▼◀▶) ㉜.

3 **Press the DATE button ⑪ to set the date on which the TV programme will be broadcast.**

4 **Press the ON button ㉒ to set the starting time.**
- When it is kept pressed, the indication changes in 30-minute intervals.

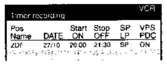
5 **Press the OFF button ㉑ to set the ending time.**

6 **Press the SP/LP button ⑳ to set the desired tape speed.**
- SP provides standard recording time and optimum picture quality.
  LP provides doubled recording time with slightly reduced picture quality.
  Regarding the "A" indication, refer to page 15.

7 **Press the Cursor button (▲▼◀▶) ㉜ to set VPS/PDC to ON or OFF (– – –).**
- See page 15 for VPS/PDC recording.

8 **Press the TAPE button ⑱ to select the corresponding cassette tape length.**
(See page 26.)

9 **Press the OK button ㉞ to conclude the settings.**
- To programme additional timer recordings, repeat operation steps **2**–**9**.



Pos Name	DATE	Start ON	Stop OFF	SP LP	VPS PDC
ZDF	27/10	20:00	21:30	SP	ON

10 **Press the TIMER REC button ⑲ to switch the VCR over to the timer recording standby mode.**
- Check that ⏲ is lit on the VCR display.
  If it is flashing, check the timer recording details again. (See page 15.)

To Suspend the Timer Recording Standby Mode

When you want to use the VCR for playback, normal recording or some other operation before the programmed timer recording will be performed, you can temporarily suspend the timer recording standby mode by pressing the TIMER REC button ⑲ so that the "⏲" indication on the VCR display disappears.

However, after you have finished using the VCR, be sure to reactivate the timer recording standby mode by pressing the TIMER REC button ⑲ again, otherwise the programmed timer recording will not be performed.

Note:

- If the VCR is not put in the timer recording standby mode at the latest 10 minutes before the programmed timer recording starting time, the "⏲" indication flashes on the VCR display. In this case, press the TIMER REC button ⑲ to put the VCR in the timer recording standby mode.

To Programme with the ShowView Function

The ShowView numbers assigned to each TV programme and published alongside the TV programme listings in newspapers and magazines make it extremely easy to set the VCR for timer recording.
The duration of a timer recording programmed with ShowView number may be slightly longer than the actual duration of the TV programme.

Preparations

- Confirm that the VCR is on.
- Confirm that the TV is on and the VCR viewing channel is selected.
- Insert a video cassette with an intact erasure prevention tab.
- Set the VCR/TV switch ㉚ to "VCR".

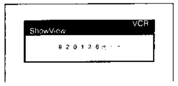
Example:
Programming a timer recording of a TV programme with the ShowView number 920126

Operations

1 **Press the SHOW VIEW button ㉗ to display the menu for entering the ShowView number on the TV.**

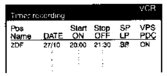
2 **Press the Numeric buttons ❷ to enter the ShowView number.**
- If you have entered a wrong digit, press the Cursor button (◀) ㉜ and then enter the correct digit.

On Screen Display



3 **Press the OK button ㉞ to display the programmed content.**

4 **Press the SP/LP button ⑳ to set the desired tape speed.**
- SP provides standard recording time and optimum picture quality.
  LP provides doubled recording time with slightly reduced picture quality.
  Regarding the "A" indication, refer to page 15.

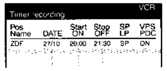


Pos Name	DATE	Start ON	Stop OFF	SP LP	VPS PDC
ZDF	27/10	20:00	21:30	SP	ON

- To extend the ending time or to make any corrections, use the Cursor button (▲▼◀▶) ㉜, the Channel buttons ⑩, the DATE button ⑪, the ON button ㉒, the OFF button ㉑, the SP/LP button ⑳.
- See page 15 for VPS/PDC recording.

5 **Press the TAPE button ⑱ to select the corresponding cassette tape length.**
(See page 26.)

6 **Press the OK button ㉞ again to conclude the settings.**
- To programme additional timer recordings, repeat operation steps **1**–**6**.



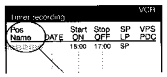
Pos Name	DATE	Start ON	Stop OFF	SP LP	VPS PDC
ZDF	27/10	20:00	21:30	SP	ON

7 **Press the TIMER REC button ⑲ to switch the VCR over to the timer recording standby mode.**
- Check that "⏲" is lit on the VCR display.
  If it is flashing, check the timer recording details again. (See page 15.)

If "– –" Appears under "Pos/Name" after Entering a ShowView Number

Pos/Name stands for Programme Position/TV Station Name.
Normally, the name of the TV station or the number of the programme position is displayed under "Pos/Name".
However, if the TV station information was not automatically set during Auto Setup due to adverse reception conditions, the "– –" indication appears instead.
In such a case, follow the operation steps below to correct it.

Press the Channel buttons ⑩ repeatedly to select the programme position on which the TV programme to be recorded will be broadcast.



Pos Name	DATE	Start ON	Stop OFF	SP LP	VPS PDC
		15:00	17:00	SP	

After you have entered the information of a TV station, it remains stored in the VCR's memory, and you do not need to enter it again in the future.

To Suspend the Timer Recording Standby Mode

When you want to use the VCR for playback, normal recording or some other operation before the programmed timer recording will be performed, you can temporarily suspend the timer recording standby mode by pressing the TIMER REC button ⑲ so that the "⏲" indication on the VCR display disappears.

However, after you have finished using the VCR, be sure to reactivate the timer recording standby mode by pressing the TIMER REC button ⑲ again, otherwise the programmed timer recording will not be performed.

Note:

- If the VCR is not put in the timer recording standby mode at the latest 10 minutes before the programmed timer recording starting time, the "⏲" indication flashes on the VCR display. In this case, press the TIMER REC button ⑲ to put the VCR in the timer recording standby mode.

Other Timer Recordings and Convenient Functions

Setting the Recording Date/Day(s)

Perform this operation in operation step **3** when programming a timer recording with the On Screen Display, or in operation step **4** when programming with the ShowView number. (See pages 13 and 14.)

You can select the recording date (day of the month/day of the week) by pressing the DATE button ⑪. If you repeatedly press the + side of the DATE button ⑪, the indication changes in the order shown below. If you press the – side of the DATE button ⑪, the indication changes in the opposite order.

- Programming a timer recording (setting the date) is possible up to one month ahead of the TV programme's broadcasting date and time. Daily and weekly timer recordings will continue until you cancel them.

→ <To Programme within 1 Month>
Example: 1 2 31
↓
<To Programme a Daily Timer Recording>
Example: Daily recording from Sunday to Saturday (Su-Sa).
Daily recording from Monday to Saturday (Mo-Sa).
Daily recording from Monday to Friday (Mo-Fr).
↓
<To Programme a Weekly Timer Recording >
Example: Weekly recording every Sunday
Weekly recording every Monday
⋮
Weekly recording every Saturday
(Su = Sunday, Mo = Monday, Tu = Tuesday,
We = Wednesday, Th = Thursday, Fr = Friday, Sa = Saturday)

Ensuring that a TV Programme Will Be Recorded until Its End (Auto SP/LP Change Function)

If, at the start of a timer recording, the VCR determines that the remaining tape time is insufficient to record the whole programme, the Auto SP/LP Change function automatically selects LP mode to ensure that the whole programme will be recorded. However, if the remaining tape time is still not sufficient even in the LP mode, the programme cannot be recorded to its end.

- If you programme a daily or weekly timer recording, recording will be performed in the LP mode from the start regardless of the remaining tape time.
- In case of a timer recording programmed with the VPS/PDC function, if the TV programme continues past the programmed ending time, the VCR automatically switches over to the LP mode at that moment. However, in some cases it may not be possible to record the programme until its end.
- Use a video cassette on which a few minutes more than the total length of programmed timer recordings remain, otherwise the programmed timer recordings may be performed in the LP mode.
- Be careful that the broadcast times of the TV programmes set for timer recording do not overlap, otherwise the programmed timer recordings may be performed in the LP mode.
- If the recording speed changes from SP to LP during a timer recording, some brief picture distortion occurs at that point.

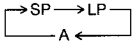
Condition for correct operation of the Auto SP/LP Change function:

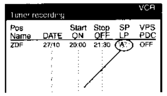
- The tape length of the inserted cassette must be set correctly. (See page 26.)

To Activate the Auto SP/LP Change Function:

In operation step **6** when programming a timer recording with the On Screen Display (see page 13), or in operation step **4** when programming with the ShowView number (see page 14), press the SP/LP button ⑳ to select "A".

- When you press this button repeatedly, the indication changes in the following order:




Timer recording VCR

Pos Name	DATE	Start ON	Stop OFF	SP LP	VPS PDC
ZDF	27/10	20:00	21:30	A	OFF

Indication when "A" is selected

Setting for Control of the Recording Starting and Ending Time by Special Signal Included in the Broadcasting Signal (VPS/PDC Function)

VPS stands for Video Programme System.
PDC stands for Programme Delivery Control.

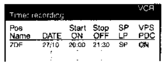
If a TV programme, for example a football game runs longer than scheduled, is shortened or starts earlier or later, this function synchronises the recording start and stop with the actual broadcasting start and stop of the TV programme.

Conditions for correct operation of the VPS/PDC function:

- "ON" must be displayed under "VPS/PDC" on the On Screen Display.
- The TV station must broadcast VPS/PDC signals.
- The programme starting time must be set correctly to the starting time listed in the newspaper/magazine.

To Activate the VPS/PDC Function:

After operation step **6** when programming a timer recording with the On Screen Display (see page 13), or in operation step **4** when programming with the ShowView number (see page 14), press the Cursor buttons (▲▼◀▶) ㉜ to make the ON indication appear.
See page 29 for details.


Timer recording VCR

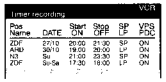
Pos Name	DATE	Start ON	Stop OFF	SP LP	VPS PDC
ZDF	27/10	20:00	21:30	SP	ON

To Check the Contents of Timer Recording Programmings

- Display the VCR picture on the TV.
- Set the VCR/TV switch ㉚ to "VCR".

1 Press the PROG./CHECK button ⑫ to display the timer recording programmings on the TV screen.
   - When the VCR is in the timer recording standby mode for a VPS/PDC recording, the On Screen Display may be distorted.

2 Press the EXIT button ㉝ to exit the On Screen Display.


Timer recording VCR

Pos Name	DATE	Start ON	Stop OFF	SP LP	VPS PDC
ZDF	27/10	20:00	21:30	SP	ON
ARD	30/10	19:00	20:00	LP	ON
N3	Su	21:00	23:30	SP	ON
ZDF	Su-Sa	17:30	18:00	LP	ON

To Change a Timer Recording Programming

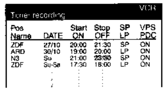
It is not possible to change a programming while the timer recording is being performed.

- Display the VCR picture on the TV.
- Set the VCR/TV switch ㉚ to "VCR".

1 Press the PROG./CHECK button ⑫ to display the timer recording programmings on the TV screen.

2 Press the Cursor buttons (▲▼) ㉜ to select the programming that you want to change.

3 Follow the operations below to change the programmed contents.
To change the broadcasting station:
Use the Channel buttons ⑩.
To change the date of the timer recording:
Use the DATE button ⑪.
To change the recording starting time:
Use the ON button ㉒.
To change the recording ending time:
Use the OFF button ㉑.
To change the recording speed:
Use the SP/LP button ⑳.


Timer recording VCR

Pos Name	DATE	Start ON	Stop OFF	SP LP	VPS PDC
ZDF	27/10	20:00	21:30	SP	ON
ARD	30/10	19:00	20:00	LP	ON
N3	Su	21:00	23:30	SP	ON
ZDF	Su-Sa	17:30	18:00	LP	ON

4 Press the OK button ㉞ to conclude the setting.

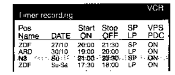
5 Press the EXIT button ㉝ to exit the On Screen Display.

To Cancel the Programming of a Timer Recording

It is not possible to cancel a programming while the timer recording is being performed.

- Display the VCR picture on the TV.
- Set the VCR/TV switch ㉚ to "VCR".

1 Press the PROG./CHECK button ⑫ to display the timer recording programmings on the TV screen.

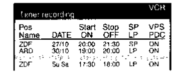

Timer recording VCR

Pos Name	DATE	Start ON	Stop OFF	SP LP	VPS PDC
ZDF	27/10	20:00	21:30	SP	ON
ARD	30/10	19:00	20:00	LP	ON
N3	Su	21:00	23:30	SP	ON
ZDF	Su-Sa	17:30	18:00	LP	ON

2 Press the Cursor buttons (▲▼) ㉜ to select the programming that you want to cancel.

3 Press the CANCEL ⑭ button.

4 Press the EXIT button ㉝ to exit the On Screen Display.


Timer recording VCR

Pos Name	DATE	Start ON	Stop OFF	SP LP	VPS PDC
ZDF	27/10	20:00	21:30	SP	ON
ARD	30/10	19:00	20:00	LP	ON
ZDF	Su Sa	17:30	18:00	LP	ON

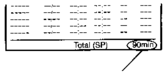
Notes for Cancelling the Programming of a Timer Recording

In some cases, for example as listed below, the programming of a timer recording remains stored in the memory until 4 a.m. the next day. However, this is not a malfunction.

- When a timer recording was not performed up to the TV programme's ending time because the remaining tape time was not sufficient.
- When you have stopped the timer recording while it was being performed.

To Check the Total Timer Recording Programming Time

The total time indication for timer recording programming lets you check how many programmes can be recorded by comparing with the remaining tape time in the VCR display.



Indication for a total timer recording programming time of 90 minutes

- The total time is calculated in the SP mode.
- The total time cannot be calculated when setting Daily/Weekly timer recording.

To select a Timer-Recorded Programme from the List and Quickly Locate Its Beginning for Automatic Playback (Programme List Search)

This VCR can display a list of the timer-recorded programmes on the inserted video cassette on the TV screen. You can then select the desired programme, and the VCR will quickly locate its beginning and start playback.

Conditions for correct operation of the Programme List Search function:

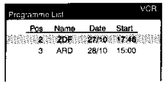
- The video cassette must not have been ejected after the timer recordings were performed.
- The tape length of the inserted cassette must be set correctly.
- The VCR must not be in the timer recording standby mode.
- A programme of at least 15 minutes must be recorded on the tape.
- If a timer recording was performed onto a recorded video cassette, the previous recording must have been completely erased by the new recording.

Preparation

- Display the VCR picture on the TV.

Operations

1 Press the SEARCH button ㉘ to display the Programme List menu.


Programme List VCR

Pos	Name	Date	Start
2	ZDF	27/10	17:46
3	ARD	28/10	15:00

2 Press the Cursor buttons (▲▼) ㉜ to select the programme that you want to locate and play back.

3 Press the SEARCH button ㉘ to start the search for the beginning of the selected programme.
   - After the desired recorded programme has been found, playback starts automatically.
   - If, after playback has started, you want to search for the beginning of the same or another programme, press the SEARCH button ㉘.
     Playback stops, and the Programme List menu appears.
     Repeat the above operations steps **2–3**.

To Cancel the Programme List Search:

Press the EXIT ㉝ button.

Hints:

- When you press the SEARCH button ㉘ in the operation step **1**, the last timer-recorded programme is selected (highlighted).
- If you take out the cassette or insert another cassette after a timer recording has finished, pressing the SEARCH button ㉘ activates the Intro-Jet Scan instead of the Programme List Search. (Refer to page 17.)
- If you programme linked timer recordings, Programme List Search function does not work.

To Quickly Find the Beginning of a Desired Programme (VISS=VHS Index Search System)

This VCR automatically records special index signals on the tape every time a recording is started. The Index search function makes use of these index signals to let you find the beginning of a desired programme quickly and easily.

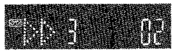
Index signals are automatically recorded in the following cases:
- When you start a recording by pressing the REC button ㉕, or REC/OTR button ㊻.
- When a timer recording starts.
- When you press the REC button ㉕ on the remote control during recording.

Conditions for correct operation of the Index search function:
- The VCR must be in the stop mode or in the playback mode.
- Each programme recorded on the tape must be at least 5 minutes long.

Preparations
- Display the VCR picture on the TV.
- Insert a recorded video cassette.

Operation

1 Press the INDEX button ㉖ (that corresponds to the direction from the current tape position in which the desired programme is located on the tape) to start the index search. For example, if you want to search for the 2nd recorded programme in forward direction, press the INDEX ►►I button ㉖ twice.



- The VCR fast-forwards or rewinds the tape and searches for the specified index signal (the beginning of the desired recorded programme).
  When it has been found, playback starts automatically.

To Cancel the Index Search or to Stop Playback:
Press the Stop button ❾.

Hints:
- Searching in either direction is possible up to the 20th index signal.
- If you press either of the INDEX buttons ㉖ too many times, simply press the other INDEX button ㉖ (indicating the opposite direction) to correct it. In this way, you can reduce the displayed figure down to 1.
- The figure on the VCR display decreases by 1 every time an index signal is located.

To Search for a Desired Programme While Checking the Recorded Contents on a Cassette (Intro-Jet Scan)

This VCR automatically records special index signals on the tape every time a recording starts. The Intro-Jet Scan function makes use of these index signals to play back the beginning of each programme recorded on the cassette one after another at high speed. This lets you quickly and easily check the contents of a cassette and find a desired programme.

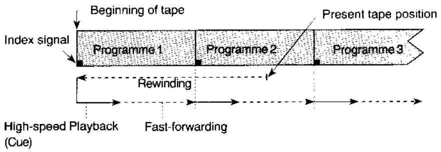
Index signals are automatically recorded in the following cases:
- When you start a recording by pressing the REC button ㉕, or REC/OTR button ㊻.
- When a timer recording starts.
- When you press the REC button ㉕ on the remote control during recording.

Conditions for correct operation of the Intro-Jet Scan function:
- The cassette must have been ejected after the timer recordings were performed.
- VCR must be switched on, be in the playback mode or be in the standby mode.
- Each programme recorded on the tape must be at least 15 minutes long.

Preparations
- Display the VCR picture on the TV.
- Insert a recorded video cassette.

Operations

1 Press the SEARCH button ㉘ to start the Intro-Jet Scan.
   - After rewinding the tape to the beginning, the VCR plays it back at high speed for approximately 10 seconds. It then fast-forwards the tape to the next tape position marked by an index signal (beginning of a programme), and every time an index signal is found, the VCR switches over to high-speed playback (Cue) for about 10 seconds.



2 When you have found the programme that you want to view, press the Play button ㉔ to start normal playback.

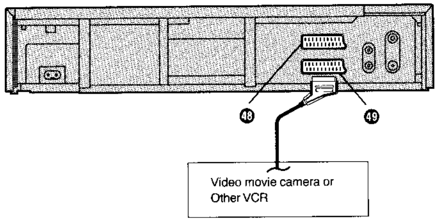
To Cancel the Intro-Jet Scan or to Stop Playback:
Press the Stop button ❾.

Note:
- If you press the SEARCH button ㉘ after a timer recording has finished, but before ejecting that cassette, the Programme List Search (for details, see page 16) will be activated instead of the Intro-Jet Scan.

Assemble Editing

The assemble editing function makes it easy to record the picture and sound of virtually any number of scenes or programmes in succession.
Assemble editing from an external source, for example from a movie camera, can be performed in the same way.

Recording unit (this VCR)



Preparations
- Connect a video movie camera or a VCR to this VCR with a 21-pin Scart cable, as shown in the illustration.
- Display the VCR picture on the TV.
- Insert the cassette on which the assemble editing is to be performed, and make sure that its erasure prevention tab is not broken out.
- Set the VCR/TV switch ㉚ to "VCR".
- Press the INPUT SELECT button ❸ to select the AV Input (external input) "A1" or "A2" according to the socket(s) on the VCR to which the source unit has been connected.

  A1: When connected to the AV1 21-pin Scart socket ㊽
  A2: When connected to the AV2 21-pin Scart socket ㊾
  - Make sure that "AV2" is set to "EXT". (See page 27.)

Operations

1 Press the Play button ㉔ to start playback.

2 At the point where you want to join a new scene, press the Pause/Slow button ❼ to put it in the still playback mode.

3 Press the REC button ㉕ to put it in the recording pause mode.

4 Start playback on the source unit and search for the point from which you want to record (copy) onto this VCR.

5 When that point is reached, press the Pause/Slow button ❼ again to start recording the new picture and sound from the playback unit.

6 To record (copy) additional scenes, press the Pause/ Slow button ❼ to put this VCR in the recording pause mode and then perform above steps **4** and **5** again.

7 At the point where you want to stop recording, press the Stop button ❾ to finish recording.

Hint:
- The new sound is recorded on both the Hi-Fi audio tracks and the normal audio track. The sound recorded on the normal audio track is always in mono.

Note:
- If you leave the VCR in the recording pause mode for more than 5 minutes in step **3** or **6**, the VCR automatically switches over to the stop mode to protect the video heads.

Connecting the VCR to a Decoder/ Connecting the VCR to a Stereo Amplifier

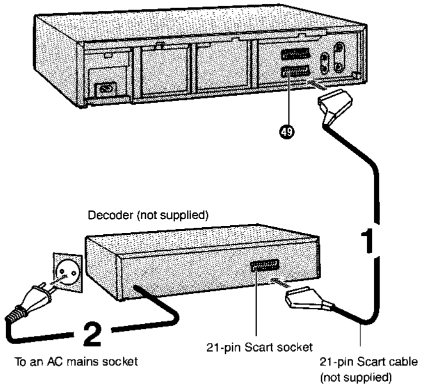
To connect this VCR to a decoder or a stereo amplifier, make the connections shown in the illustration below.
For the connection to the TV, see page 7.

For details about the connection, also read the operating instructions of the decoder or stereo amplifier.

Be sure to keep the VCR, TV and decoder or stereo amplifier switched off until you have finished all connections.
For your safety, do not connect or handle the equipment with wet hands.

To Connect the VCR to a Decoder

Decoder here refers to the device used to decode scrambled broadcasts (Pay TV).



㊾
Decoder (not supplied)
1
2
To an AC mains socket
21-pin Scart socket
21-pin Scart cable (not supplied)

1 Connect a 21-pin Scart cable (not supplied) to the AV2 21-pin Scart socket ㊾ on the VCR and to the 21-pin Scart socket on the decoder.

2 Connect the decoder's mains lead to an AC mains socket.

3 Set "AV2" to "DECODER".
For details, see page 27.

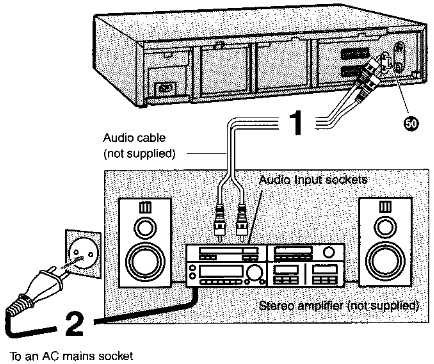
AV Link Function
If the VCR is connected to the TV via a 21-pin Scart cable, you can use AV LINK button ⑰ to switch the TV from normal TV reception over to the video playback channel (AV input) (and vice versa). In the VCR mode (when the VCR indication in the VCR display is lit), the TV is switched to the video playback channel (AV input). In the TV mode (when the VCR indication is not lit), the TV is switched to TV reception.

	VCR	TV
VCR Mode	VCR indication is lit.	AV Input is selected.
TV Mode	VCR indication is not lit.	TV reception is selected.

- When you press the MENU button ㉟ to display the menu on the TV screen, the TV is also automatically switched to the VCR mode, however, the VCR indication does not appear in this case.
- When you start playback on the VCR, the TV is automatically switched to the VCR mode. However, during playback, it is not possible to switch the TV back to the TV mode.
- If a Pay TV station has been selected on the VCR when you switch to the TV mode, the picture on the TV is scrambled when you select a Pay TV station on the TV. In this case, either switch to the VCR mode or select the AV input on the TV.

Hint:
"RGB" means separate Red/Green/Blue colour signals. If you connect a TV equipped with RGB input capability to the AV1 socket ㊽ on this VCR, and a decoder equipped with RGB output capability to the AV2 socket ㊾, the TV can receive RGB signal input from the decoder via the VCR.

To Connect the VCR to a Stereo Amplifier



Audio cable (not supplied)
1
㊿
Audio Input sockets
Stereo amplifier (not supplied)
2
To an AC mains socket

1 Connect an Audio cable (not supplied) to the Audio Output sockets ㊿ on the VCR and to Audio Input sockets on the stereo amplifier.

2 Connect the stereo amplifier's mains lead to an AC mains socket.

Connecting the VCR to a Satellite Receiver or Digital Receiver

Satellite receiver here includes a digital receiver.

The connection method differs depending on the type of your satellite receiver.

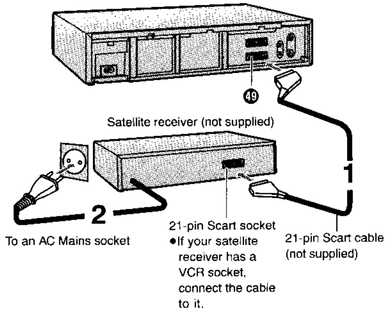
For details about the connection, also read the satellite receiver's operating instructions.

If the Satellite Receiver is Equipped with a 21-pin Scart Socket

If your satellite receiver is equipped with a 21-pin Scart socket, use a 21-pin Scart cable to connect the VCR.

For the connection to the TV, refer to page 7.

Be sure to keep the VCR, TV and satellite receiver switched off until you have finished all connections.
For your safety, do not connect or handle the equipment with wet hands.



㊾
Satellite receiver (not supplied)
1
2
To an AC Mains socket
21-pin Scart socket
21-pin Scart cable (not supplied)

- If your satellite receiver has a VCR socket, connect the cable to it.

1 Connect a 21-pin Scart cable (not supplied) to the AV2 21-pin Scart socket ㊾ on the VCR and to the 21-pin Scart socket on the satellite receiver.

2 Connect the satellite receiver's mains lead to an AC mains socket.

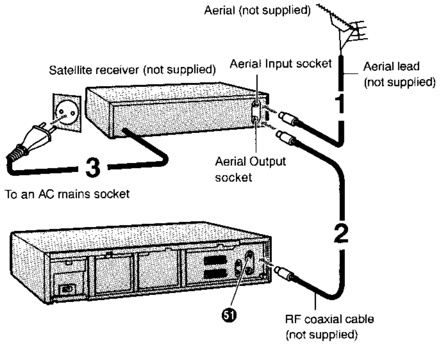
3 Set "AV2" to "EXT" or "TIMER".
For details, see page 27.

If the Satellite Receiver Is Not Equipped with a 21-Pin Scart Socket

In case your satellite receiver is not equipped with a 21-pin Scart socket, use the RF coaxial cable to connect it to the VCR.

For the connection to the TV, refer to page 7.

Be sure to keep the VCR, TV and satellite receiver switched off until you have finished all connections.
For your safety, do not connect or handle the equipment with wet hands.



Aerial (not supplied)
Satellite receiver (not supplied)
Aerial Input socket
Aerial lead (not supplied)
1
3
Aerial Output socket
To an AC mains socket
2
(51)
RF coaxial cable (not supplied)

1 Connect the aerial lead to the Aerial Input socket on the satellite receiver.

2 Connect the RF coaxial cable to the Aerial Output socket on the satellite receiver and to the Aerial Input socket (51) on the VCR.

3 Connect the satellite receiver's mains lead to an AC mains socket.

Hint:
- The RF output channel of the satellite receiver should be adjusted away from channel 36, which is used by the VCR, e.g. re-adjust to channel 33.

Tuning and Assigning the TV Stations Available in Your Area to the Programme Positions (Manual Tuning)

This VCR has 99 programme positions that can be preset to receive TV stations.

Usually, if you switch the VCR on for the first time after making the necessary connections, the VCR will start the Auto Setup function automatically so that all available TV stations in the area can be received.

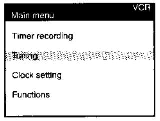
However, if Auto Setup is not successful due to extraordinary transmission circumstances, or if you want to change the name of a TV station or change a TV station from its regular programme position to one of your preference, you can set it up manually. This is called Manual Tuning.

Preparation

- Set the VCR/TV switch ㉚ to “VCR”.

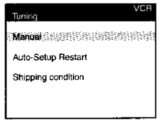
To Change the Order in Which the TV Stations Are Assigned to the Programme Positions

1 Press the MENU button ㉟ to display the Main menu on the TV screen.



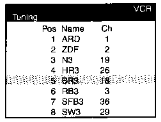
VCR
Main menu
Timer recording
Tuning
Clock setting
Functions

2 Press the Cursor buttons (▲▼) ㉜ to select “Tuning” then press the OK button ㉞.



VCR
Tuning
Manual
Auto-Setup Restart
Shipping condition

3 Press the Cursor buttons (▲▼) ㉜ to select “Manual” then press the OK button ㉞ to display the list of tuned TV stations.

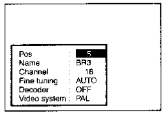


VCR
Tuning

Pos	Name	Ch
1	ARD	1
2	ZDF	2
3	N3	19
4	HR3	26
5	BR3	18
6	RB3	3
7	SFB3	36
8	SW3	29

4 Press the Cursor buttons (▲▼) ㉜ to select the TV station that you want to assign to a different programme position.

5 Press the OK button ㉞ to display the Manual Tuning menu.



Pos : 5
Name : BR3
Channel : 18
Fine tuning : AUTO
Decoder : OFF
Video system : PAL

6 Press the Cursor buttons (▲▼◀▶) ㉜ to select the entry field for “Pos”.

7 Press the Numeric buttons ❷ to enter the number of the desired programme position.

8 Press the OK button ㉞ to conclude the setting.

9 Press the EXIT button ㉝ to exit the On Screen Display.

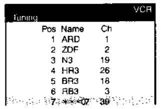
To Enter or Change the Name of a TV Station

1 Press the MENU button ㉟ to display the Main menu on the TV screen.

2 Press the Cursor buttons (▲▼) ㉜ to select “Tuning” then press the OK button ㉞.

3 Press the Cursor buttons (▲▼) ㉜ to select “Manual” then press the OK button ㉞ to display the list of tuned TV stations.

4 Press the Cursor buttons (▲▼◀▶) ㉜ to select a programme position whose TV station name is indicated as ＊□□□□.

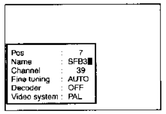


VCR
Tuning

Pos	Name	Ch
1	ARD	1
2	ZDF	2
3	N3	19
4	HR3	26
5	BR3	18
6	RB3	3
7	＊＊＊07	39

5 Press the OK button ㉞ to display the Manual Tuning menu.

6 Press the Cursor buttons (▲▼◀▶) ㉜ to select the entry field for “Name”.



Pos : 7
Name : SFB3
Channel : 39
Fine tuning : AUTO
Decoder : OFF
Video system : PAL

7 Use the Cursor buttons (▲▼◀▶) ㉜ and OK button ㉞ to enter the station name.

- If the station name needs a blank space, select the blank between “Z” and “＊”.

8 Press the EXIT button ㉝ to exit the On Screen Display.

Hint:

- If you want to abort the entering or changing of the TV station name in step 7 above, press the EXIT button ㉝. However, as the characters that you have entered are stored as the station name, be sure to enter the correct name.

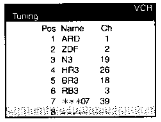
To Enter Newly Available TV Stations

1 Press the MENU button ㉟ to display the Main menu on the TV screen.

2 Press the Cursor buttons (▲▼) ㉜ to select “Tuning” then press the OK button ㉞.

3 Press the Cursor buttons (▲▼) ㉜ to select “Manual” then press the OK button ㉞ to display the list of tuned TV stations.

4 Press the Cursor buttons (▲▼◀▶) ㉜ to select an unused programme position.



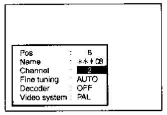
VCH
Tuning

Pos	Name	Ch
1	ARD	1
2	ZDF	2
3	N3	19
4	HR3	26
5	BR3	18
6	RB3	3
7	＊＊＊07	39
8	----	

5 Press the OK button ㉞ to display the Manual Tuning menu.

6 Press the Numeric buttons ❷ to enter the channel number of the desired TV station.

- Wait a few moments until the desired TV station has been tuned.



Pos : 8
Name : ＊＊＊08
Channel : 2
Fine tuning : AUTO
Decoder : OFF
Video system : PAL

7 Press the OK button ㉞ to conclude the setting.

8 Press the EXIT button ㉝ to exit the On Screen Display.

To Change the Channel Number of an Already Tuned TV Station:

You can change it in the same way as explained above. However, in step **4** select the programme position of the TV station that you want to change to another channel number, and after pressing the OK button ㉞ in step **5**, use the Cursor buttons (▲▼◀▶) ㉜ to select the entry field for “Channel”.

List of TV Reception Channels

Channel Indication	TV Channel	
	Germany/Italy	Other Countries
2–12	*E2–E12	E2–E12
13–20	A–H (Only Italy)	—
21–69	21–69	21–69
74–78	S01–S05	S1–S5
80–82	S1–S3	M1–M3
83–89	S4–S10	M4–M10
90–99	S11–S20	U1–U10
121–141 Hyperband	**S21–S41	S21–S41

* In Italy: H1...(11), H2...(12)
** Only for 8 MHz channel raster

To Obtain the Best Tuning Condition

1 Press the MENU button ㉟ to display the Main menu on the TV screen.

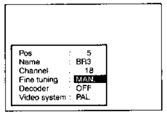
2 Press the Cursor buttons (▲▼) ㉜ to select “Tuning” then press the OK button ㉞.

3 Press the Cursor buttons (▲▼) ㉜ to select “Manual” then press the OK button ㉞ to display the list of tuned TV stations.

4 Press the Cursor buttons (▲▼◀▶) ㉜ to select the TV station for which you want to obtain the best tuning condition.

5 Press the OK button ㉞ to display the Manual Tuning menu.

6 Press the Cursor buttons (▲▼◀▶) ㉜ to select the entry field for “Fine tuning”.



Pos : 5
Name : BR3
Channel : 18
Fine tuning : MAN.
Decoder : OFF
Video system : PAL

7 Press the Cursor buttons (▲▼) ㉜ to obtain the best tuning condition.

- If you do not want to change the tuning condition, press the Cursor button (▶) ㉜ to return to the original condition (AUTO).

8 Press the OK button ㉞ to conclude the setting.

9 Press the EXIT button ㉝ to exit the On Screen Display.

To Preset Pay TV Stations

1 Press the MENU button ㉟ to display the Main menu on the TV screen.

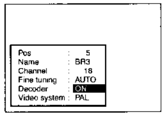
2 Press the Cursor buttons (▲▼) ㉜ to select “Tuning” then press the OK button ㉞.

3 Press the Cursor buttons (▲▼) ㉜ to select “Manual” then press the OK button ㉞ to display the list of tuned TV stations.

4 Press the Cursor buttons (▲▼◀▶) ㉜ to select the pay TV station.

5 Press the OK button ㉞ to display the Manual Tuning menu.

6 Press the Cursor buttons (▲▼◀▶) ㉜ to select the entry field for “Decoder”.



Pos : 5
Name : BR3
Channel : 18
Fine tuning : AUTO
Decoder : ON
Video system : PAL

7 Press the Cursor buttons (▲▼) ㉜ to select “ON”.

ON: To preset pay TV stations.
OFF: To preset normal TV stations.

8 Press the OK button ㉞ to conclude the setting.

9 Press the EXIT button ㉝ to exit the On Screen Display.

To Change the Type of Video System (Colour TV system)

1 Press the MENU button ㉟ to display the Main menu on the TV screen.

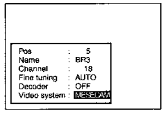
2 Press the Cursor buttons (▲▼) ㉜ to select "Tuning" then press the OK button ㉞.

3 Press the Cursor buttons (▲▼) ㉜ to select "Manual" then press the OK button ㉞ to display the list of tuned TV stations.

4 Press the Cursor buttons (▲▼◀▶) ㉜ to select the TV station for which you want to change the type of video system.

5 Press the OK button ㉞ to display the Manual Tuning menu.

6 Press the Cursor buttons (▲▼◀▶) ㉜ to select the entry field for "Video system".


Pos : 5
Name : BR3
Channel : 18
Fine tuning : AUTO
Decoder : OFF
Video system : MESECAM

7 Press the Cursor buttons (▲▼) ㉜ to change the type of video system "PAL" or "MESECAM".
PAL: For receiving PAL signals.
MESECAM: For receiving SECAM signals.

8 Press the OK button ㉞ to conclude the setting.

9 Press the EXIT button ㉝ to exit the On Screen Display.

To Select the Type of Sound to Be Recorded (NV-FJ610EC/ECM/ECY Series, FJ606EC/ECM Series, FJ604ECM Series)

1 Press the MENU button ㉟ to display the Main menu on the TV screen.

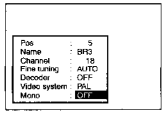
2 Press the Cursor buttons (▲▼) ㉜ to select "Tuning" then press the OK button ㉞.

3 Press the Cursor buttons (▲▼) ㉜ to select "Manual" then press the OK button ㉞ to display the list of tuned TV stations.

4 Press the Cursor buttons (▲▼◀▶) ㉜ to select the desired TV station.

5 Press the OK button ㉞ to display the Manual Tuning menu.

6 Press the Cursor buttons (▲▼◀▶) ㉜ to select the entry field for "Mono".


Pos : 5
Name : BR3
Channel : 18
Fine tuning : AUTO
Decoder : OFF
Video system : PAL
Mono : OFF

7 Press the Cursor buttons (▲▼) ㉜ to select "OFF".
- Select "ON" if you want to record the normal (mono) sound on the Hi-Fi audio tracks during a stereo, bilingual or NICAM broadcast, or if the stereo sound is distorted due to inferior reception conditions.

8 Press the OK button ㉞ to conclude the setting.

9 Press the EXIT button ㉝ to exit the On Screen Display.

To Facilitate the Following Operations with the Instruction Indications on the On Screen Display

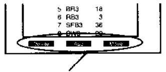
- To delete a programme position
- To insert a blank programme position
- To move a TV station to another programme position

Use the coloured instruction indications displayed below the list of tuned TV stations and the corresponding coloured buttons.

1 Press the MENU button ㉟ to display the Main menu on the TV screen.

2 Press the Cursor buttons (▲▼) ㉜ to select "Tuning" then press the OK button ㉞.

3 Press the Cursor buttons (▲▼) ㉜ to select "Manual" then press the OK button ㉞ to display the list of tuned TV stations.


5 BR3 18
6 RB3 3
7 SFB3 36

Indications for Delete, Add and Move

4 Press the Cursor buttons (▲▼◀▶) ㉜ to select the desired TV station.

5 Follow the operations below.
To delete a programme position (Delete):
Press the Channel button (∧, red) ⑩.
To insert a blank programme position (Add):
Press the DATE button (+, green) ⑪.
To move a TV station to another programme position (Move):
Press the ON button (+, yellow) ㉒, and then use the Cursor buttons (▲▼) ㉜ to select the new programme position to which you want to assign the TV station.

6 Press the OK button ㉞ to conclude the setting.

7 Press the EXIT button ㉝ to exit the On Screen Display.

Hint:
- If you have performed Manual Tuning to enter TV stations, the "– –" indication may appear under "Pos/Name" on the On Screen Display when programming a ShowView timer recording.

Restarting the Auto Setup/ Resetting the VCR to the Shipping Condition

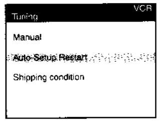
Performing Auto Setup automatically tunes all TV stations available in your area for the VCR.
Restarting this function is convenient when you move to another area and may need to set up the VCR again.

To Restart the Auto Setup

To perform the Auto Setup again, follow the operation steps below.

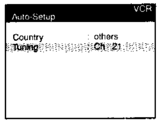
1 Press the MENU button ㉟ to display the Main menu on the TV screen.

2 Press the Cursor buttons (▲▼) ㉜ to select "Tuning" then press the OK button ㉞.



3 Press the Cursor buttons (▲▼) ㉜ to select "Auto-Setup Restart" then press the OK button ㉞ to prepare for Auto Setup start.

4 Press the OK button ㉞ again to actually start the Auto Setup.



Country : others
Tuning : Ch 21

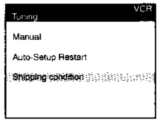
To Return the VCR to the Shipping Condition

If you want to reset the VCR to the factory preset condition, follow the operation steps below.

1 Press the MENU button ㉟ to display the Main menu on the TV screen.

2 Press the Cursor buttons (▲▼) ㉜ to select "Tuning" then press the OK button ㉞.

3 Press the Cursor buttons (▲▼) ㉜ to select "Shipping condition" then press the OK button ㉞ to prepare for resetting the VCR to the shipping condition.



4 Press the OK button ㉞ to actually change the settings back to the shipping condition.
- To re-tune the VCR, disconnect and reconnect the AC Mains Cable.

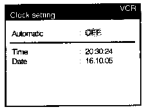
Setting the VCR's Clock

Usually, the VCR's Auto Setup function automatically adjusts the clock to the correct time.
Under some reception conditions, however, the VCR cannot set the clock automatically.
In this case, follow the operation steps below to manually set the clock.

To Manually Adjust the Clock

1 Press the MENU button ㉟ to display the Main menu on the TV screen.

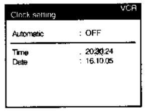
2 Press the Cursor buttons (▲▼) ㉜ to select "Clock setting" then press the OK button ㉞.
- The Clock setting menu appears on the TV.



Clock setting VCR
Automatic : OFF
Time : 20:30:24
Date : 16.10.05

3 Confirm that "Automatic" is set to "OFF", and then press the OK button ㉞.

4 Use the Cursor buttons (▲▼◀▶) ㉜ to set the date and time.
- Instead of the Cursor buttons (▲▼◀▶) ㉜, you can also use the numeric buttons ❷ to set the date and time.



Clock setting VCR
Automatic : OFF
Time : 20:30:24
Date : 16.10.05

5 Press the OK button ㉞ to conclude the setting.

6 Press the EXIT button ㉝ to exit the On Screen Display.

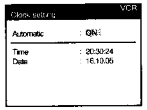
To Activate the Automatic Time Correction Function

If a TV station transmits a signal for time setting, performing the operation steps below activates the Automatic time correction function and the time is corrected automatically.

1 Press the MENU button ㉟ to display the Main menu on the TV screen.

2 Press the Cursor buttons (▲▼) ㉜ to select "Clock setting" then press the OK button ㉞.
- The Clock setting menu appears on the TV.

3 Use the Cursor buttons (▲▼) ㉜ to set "Automatic" to "ON".



Clock setting VCR
Automatic : ON
Time : 20:30:24
Date : 16.10.05

4 Press the OK button ㉞ to conclude the setting.
- Under adverse reception conditions, etc., the Automatic time correction function may not work. In this case, the indication for "Automatic" is automatically reset to "OFF".
If the reception conditions improve later on, it may be possible to activate this function.

5 Press the EXIT button ㉝ to exit the On Screen Display.

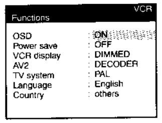
Hints:
- If "Automatic" is set to "ON" when you open the Clock screen, do not set it to "OFF", otherwise, the automatic time correcting function is deactivated.
- The built-in clock employs the 24-hour system.
- In case of a power failure, an automatic back-up system automatically maintains the operation of the clock for at least 60 minutes.
- When "Automatic" on the Clock setting menu is set to "ON", the automatic time correction function checks and if necessary adjusts the time several times every day.
The automatic time correction function only works when the VCR is switched off; it does not work in the timer recording standby mode.
- If "Automatic" is set to "OFF" and "Power save" to "ON" (see page 27), the time may not be maintained correctly. In this case, manually adjust the clock.
- If "Automatic" is set to "ON" and "Power save" to "ON", the Automatic time correction function does not work while the VCR is turned off. However, as soon as it is turned on, the Automatic time correction function is activated and the clock is set correctly.

Other Convenient Functions (Various Settings)

For Automatic Display on the TV Screen of the TV Station Information, etc.

1 Press the MENU button ㉟ to display the Main menu on the TV screen.

2 Press the Cursor buttons (▲▼) ㉜ to select "Functions" then press the OK button ㉞.



Functions VCR
OSD : ON
Power save : OFF
VCR display : DIMMED
AV2 : DECODER
TV system : PAL
Language : English
Country : others

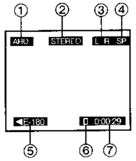
3 Press the Cursor buttons (▲▼◀▶) ㉜ to select "OSD" and the entry field for "OSD" in this order.

4 Press the Cursor buttons (▲▼) ㉜ to select "ON".
- The TV station information, type of sound system of the programme being watched and the sound playback mode are displayed on the TV screen.

5 Press the OK button ㉞ to conclude the setting.

6 Press the EXIT button ㉝ to exit the On Screen Display.

Indications that Can Be Displayed on the TV Screen with This Function:
At a press of the OSD/DISPLAY button ❺, the following indications appear on the TV screen.



① **TV station name**

② **STEREO or BILINGUAL Indicator (NV-FJ610EG/EGY Series, FJ606EG/EGY Series, FJ604EG Series)**
When receiving a TV programme, the type of sound system in which it is broadcast is automatically indicated.

STEREO, M1 and M2 Indicator (NV-FJ610EC/ECM/ECY Series, FJ606EC/ECM Series, FJ604ECM Series)
When receiving a TV programme with the Stereo, Bilingual or NICAM sound system, the type of sound system in which it is broadcast is automatically indicated.

STEREO:	When receiving a Stereo/NICAM stereo broadcast.
M1/M2:	When receiving a Bilingual/NICAM dual-sound broadcast.
M1:	When receiving a NICAM monaural broadcast.

③ **Sound mode during playback (L/R)**
At each press of the AUDIO button ⓯, the selected playback sound is indicated with L (Left) and R (Right).
Stereo playback:
The L and R indications are displayed.
Left audio channel playback:
The L indication alone is displayed.
Right audio channel playback:
The R indication alone is displayed.
Playback of normal audio track:
Neither L nor R indication is displayed.

④ **Tape speed indicator**

⑤ **Tape length indicator**
At each press of the TAPE button ⓲, the selected tape length is indicated.

◀E-180:	For E30, -60, -90, -120 and -180 tapes
E-195:	For E195 tape
E-240:	For E240 tape
E-260 ▶:	For E260 and -300 tapes

- Even if you have selected the correct tape length, the remaining tape time may not be indicated correctly with certain kinds of cassettes.

⑥ **Tape running display**

Stop	▯
Rewind	◀◀
Fast Forward	▶▶
Playback	▷
Recording	●
Repeat Playback	R

⑦ **Present time/Tape counter/Remaining tape time/Index Search/One-Touch Recording (OTR) /Playback Off Timer Function**

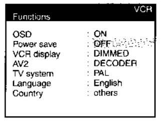
Present time	17:24:31
Tape counter	−2:35.47
Remaining tape time	REMAIN 2:34
Index Search	▶▶ 02
One-Touch Recording (OTR)	OTR 60
Playback Off Timer Function	30

Notes:
- If "OSD" is set to "OFF", none of the above indications appear.
- None of the above indications appear during special playback.
- During playback and when the AV input for the external source is selected, indications ① and ② do not appear.
- Some of the above indications do not appear when using NTSC tapes.

For Reduced the VCR's Power Consumption When the VCR Is Switched Off

1 Press the MENU button ㉟ to display the Main menu on the TV screen.

2 Press the Cursor buttons (▲▼) ㉜ to select "Functions" then press the OK button ㉞.


Functions VCR
OSD : ON
Power save : OFF
VCR display : DIMMED
AV2 : DECODER
TV system : PAL
Language : English
Country : others

3 Press the Cursor buttons (▲▼◀▶) ㉜ to select "Power save" and the entry field for "Power save" in this order.

4 Press the Cursor buttons (▲▼) ㉜ to select "ON" or "OFF".

ON: In this setting, the power consumption is greatly minimised when the VCR is turned off (Standby mode). In this case, the following happens:
- The item "VCR display" is automatically set to "OFF".
- To turn the VCR on, keep the VCR-ON/OFF button ❶ pressed on the VCR main unit. It is not possible to turn it on with the remote control.
- The Power save function works only when the VCR is turned off (Standby mode). It does not operate in the timer recording standby mode. After all programmed timer recordings have been made, and after all programmed data have been erased, the VCR switches over to the Power save mode.
- When the VCR is off, Pay TV programmes cannot be watched on the TV because the signal from the connected decoder is not looped through. To watch them, turn on the VCR.

OFF: In this setting, the power consumption is not reduced when the VCR is turned off (Standby mode).

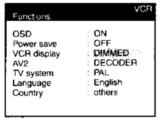
5 Press the OK button ㉞ to conclude the setting.

6 Press the EXIT button ㉝ to exit the On Screen Display.

For Automatic Change of the Brightness of the VCR Display When the VCR Is Switched Off

1 Press the MENU button ㉟ to display the Main menu on the TV screen.

2 Press the Cursor buttons (▲▼) ㉜ to select "Functions" then press the OK button ㉞.


Functions VCR
OSD : ON
Power save : OFF
VCR display : DIMMED
AV2 : DECODER
TV system : PAL
Language : English
Country : others

3 Press the Cursor buttons (▲▼◀▶) ㉜ to select "VCR display" and the entry field for "VCR display" in this order.

4 Press the Cursor buttons (▲▼) ㉜ to select the desired condition.
- When the VCR is switched off, the brightness of the VCR display is as follows:
  ON: Indications are brightly lit.
  OFF: Indications are not lit.
  DIMMED: Indications are dimly lit.

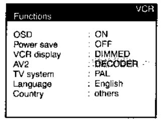
5 Press the OK button ㉞ to conclude the setting.

6 Press the EXIT button ㉝ to exit the On Screen Display.

To Set the Type of External Source Equipment that Is Connected to the AV2 21-pin Scart Socket

1 Press the MENU button ㉟ to display the Main menu on the TV screen.

2 Press the Cursor buttons (▲▼) ㉜ to select "Functions" then press the OK button ㉞.


Functions VCR
OSD : ON
Power save : OFF
VCR display : DIMMED
AV2 : DECODER
TV system : PAL
Language : English
Country : others

3 Press the Cursor buttons (▲▼◀▶) ㉜ to select "AV2" and "DECODER", "TIMER" or "EXT" in this order.

4 Press the Cursor buttons (▲▼) ㉜ to select the type of external source equipment which is connected to the VCR's AV2 21-pin socket.
- Set the external source equipment as follows:
  DECODER: When a decoder is connected.
  TIMER: When a digital receiver is connected.
  - When this is set, it is possible to have timer recordings for a Digital Receiver execute automatically simply by switching the Digital Receiver into timer standby mode and then switching this VCR into timer recording standby mode. (See page 12.)

  EXT: When another VCR or a satellite receiver is connected.

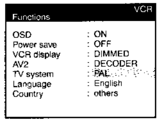
5 Press the OK button ㉞ to conclude the setting.

6 Press the EXIT button ㉝ to exit the On Screen Display.

To Set the Colour TV System Used During Playback or Recording from an External Source

1 Press the MENU button ㉟ to display the Main menu on the TV screen.

2 Press the Cursor buttons (▲▼) ㉜ to select "Functions" then press the OK button ㉞.


Functions VCR
OSD : ON
Power save : OFF
VCR display : DIMMED
AV2 : DECODER
TV system : PAL
Language : English
Country : others

3 Press the Cursor buttons (▲▼◀▶) ㉜ to select "TV system" and "PAL/MESECAM" in this order.

4 Press the Cursor buttons (▲▼) ㉜ to select the type of colour TV system (PAL or MESECAM) to be used during playback or during recording from an external source.

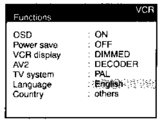
5 Press the OK button ㉞ to conclude the setting.

6 Press the EXIT button ㉝ to exit the On Screen Display.

Language Setting

1 Press the MENU button ㉟ to display the Main menu on the TV screen.

2 Press the Cursor buttons (▲▼) ㉜ to select "Functions" then press the OK button ㉞.


Functions VCR
OSD : ON
Power save : OFF
VCR display : DIMMED
AV2 : DECODER
TV system : PAL
Language : English
Country : others

3 Press the Cursor buttons (▲▼◀▶) ㉜ to select "Language" and the entry field for "Language" in this order.

4 Press the Cursor buttons (▲▼) ㉜ to select the desired language.
Pressing the Cursor button (▼) ㉜ repeatedly changes the indication in the following order:

→ English → Deutsch → Français → Italiano → Español
Suomi ← Norsk ← Dansk ← Nederlands ← Svenska

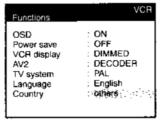
5 Press the OK button ㉞ to conclude the setting.

6 Press the EXIT button ㉝ to exit the On Screen Display.

Country Setting

1 Press the MENU button ㉟ to display the Main menu on the TV screen.

2 Press the Cursor buttons (▲▼) ㉜ to select "Functions" then press the OK button ㉞.


Functions VCR
OSD : ON
Power save : OFF
VCR display : DIMMED
AV2 : DECODER
TV system : PAL
Language : English
Country : others

3 Press the Cursor buttons (▲▼◀▶) ㉜ to select "Country" and the entry field for "Country" in this order.

4 Press the Cursor buttons (▲▼) ㉜ to select the desired country.
Pressing the Cursor button (▼) ㉜ repeatedly changes the indication in the following order:

→ others → België → Belgique → Belgien → Danmark
Italia ← France ← España ← Deutschland
→ Nederland → Norge → Österreich → Portugal
Svizzera ← Suisse ← Schweiz ← Sverige ← Suomi

5 Press the OK button ㉞ to conclude the setting.

6 Press the EXIT button ㉝ to exit the On Screen Display.

Glossary

VPS (Video Programme System)/ PDC (Programme Delivery Control)

The Video Programme System (VPS) or the Programme Delivery Control (PDC) is a very convenient system which assures that the TV programmes you have programmed for timer recording will be recorded exactly from beginning to end, even if the actual broadcasting time differs from the scheduled time due to delayed start or extension of the programme duration. Also, if a programme is interrupted and, for example, some special news is inserted, the recording will also be interrupted automatically and resumed when the programme continues.
Depending on the signals sent from the TV stations, the VPS/PDC system may not operate properly even when "VPS/PDC" has been set to "ON".
Please check with the broadcasters in your area for details.

- In the case of VPS/PDC recording, use the correct time (VPS/PDC time) for recording the TV programmes.
  Set "VPS/PDC" to "OFF" when the recording time is not the correct time (VPS/PDC time).
  VPS/PDC recording is not performed when the time (VPS/PDC time) is incorrect, even if only by one minute. To find out the correct time (VPS/PDC time), consult Teletext, a newspaper or magazine, or other source.
- If the actual broadcasting times of timer recordings overlap (regardless of whether they are VPS/PDC controlled), the recording that starts first always has priority, and the recording of the later beginning programme will start only after the first timer recording has finished.
- When the VPS/PDC signal drops out because the broadcast signal is weak, or when a TV station does not transmit a regular VPS/PDC signal, the timer recording will be performed in the normal mode (without VPS/PDC) even if it was programmed for VPS/PDC.
  In this case, even if the timer recording is performed, whatever has been programmed will not be cancelled at that particular time but at 4 a.m. on the following day.
- The start times of scheduled programmes listed in the newspaper or magazine may be changed at a later date. Set "VPS/PDC" to "OFF" when programming a programme whose start time has been subsequently changed. Particular care must be taken in this respect with ShowView programming since "VPS/PDC" is automatically set to "ON" in some countries.
- If a programme listed in a newspaper or magazine has two ShowView numbers, use the ShowView number for VPS/PDC if you wish to proceed with VPS/PDC recording using ShowView programming.
- The default settings for "VPS/PDC" differ depending on the country concerned. Refer to the table on the right.

Programming method / **Selected Country**	**ShowView programming**	**Changes in ShowView programming start time**	**Non-ShowView programming**
France, Belgium, Netherlands, Sweden, Denmark, Finland, Norway	ON	OFF	OFF
Germany, Switzerland, Austria, Other Countries	ON	ON	ON
Italy, Spain, Portugal	OFF	OFF	OFF

- If the broadcasting station is not transmitting VPS/PDC signals, "– – –" appears in the menu for timer programming under "VPS/PDC".

NICAM Broadcasting System (NV-FJ610EC/ECM/ECY Series, FJ606EC/ECM Series, FJ604ECM Series)

NV-FJ610EC/ECM/ECY Series, FJ606EC/ECM Series, FJ604ECM Series feature the NICAM digital sound system, a 2-channel sound broadcast system that provides either 2 high-quality stereo sound tracks or 2 independent mono sound tracks, M1 and M2.
NICAM programmes are always accompanied by standard (mono) sound broadcasts, and during playback, you can select the desired sound with the AUDIO button ⓯.

- The NICAM stereo sound can only be recorded on the Hi-Fi audio tracks.
- If, for some reason, you want to record a stereo, bilingual or NICAM TV programme intentionally in mono on the Hi-Fi audio tracks, set "Mono" to "ON" for the programme position on which the desired programme is broadcast, as described on page 23.

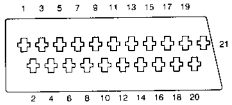
Important Note on the NICAM System
When NV-FJ610EC/ECM/ECY Series, FJ606EC/ECM Series, FJ604ECM Series are switched on, the tuner automatically switches to a NICAM broadcast if NICAM is being transmitted. During test transmissions, it is possible that the sound received does not correspond to the picture being viewed. In order to receive synchronised sound and picture, select monaural sound with the AUDIO button ⓯ or setting "Mono" to "ON". This applies only until NICAM transmissions are fully operational.
Even if the sound track is in mono, the STEREO indication will appear.

Crystal View Control (CVC)

The crystal view control function ensures that you always obtain the optimum picture quality so that you get the best picture automatically.
While the VCR is turned on, the CVC indication ㊹ is always displayed to show that the Crystal View Control is activated.

21-pin Scart Socket

The 21-pin Scart socket transmits both input and output signals for picture and sound. TVs equipped with the same type of socket can be connected here.
This type of socket is also called Peritel, Euro Connector and Euro AV.



1	Audio output CH2 (R)	12	No connection
2	Audio input CH2 (R)	13	Red ground
3	Audio output CH1 (L)	14	Blanking ground
4	Audio ground	15	Red
5	Blue ground	16	Blanking
6	Audio input CH1 (L)	17	Video output ground
7	Blue	18	Video input ground
8	Switching voltage	19	Video output
9	Green ground	20	Video input
10	Control signal	21	Ground
11	Green		

The Red, Green and Blue (RGB) video signals are looped through only from an external source unit, for example from a connected a pay-TV decoder, i.e. they are not from tape playback.

2.4. INTRODUCTION OF VIDEO HEAD CLEANING CASSETTE (POLISHING TYPE)

1. We are pleased to introduce Panasonic Video Head Cleaning Cassette, **VFK0923FT** [for service purposes] and **VFK0923FSE** [for end users] for all VHS/SVHS VCP and VCR.
2. These cleaning cassettes are exclusive removing the hard and sticky clogging on video heads.
3. These improve the efficiency of video head cleaning service and shortening cleaning time for end users.

	VFK0923FT (For Service usage)	**VFK0923FSE** (For end users)
Type of Cassette	Full VHS Cassette	Full VHS Cassette
Cleaning Time	10 Seconds/Time	10 Seconds/Time
Tape Length	20 m	3.34 m
Usability in a Path	180 Times	30 Times

Note:

The tape material itself is the same in both types.

[VFK0923FT]

Panasonic
PRO
30

[VFK0923FSE]

2.5. Caution for AC Mains Lead (NV-FJ610B/BL, NV-FJ611B)

For your safety please read the following text carefully
This appliance is supplied with a moulded three pin mains plug for your safety and convenience.
A 5 amp fuse is fitted in this plug.
Should the fuse need to be replaced please ensure that the replacement fuse has a rating of 5 amps and that it is approved by ASTA or BSI to BS 1362.
Check for the ASTA mark ◈ or the BSI mark ♡on the body of the fuse.

If the plug contains a removable fuse cover you must ensure that it is refitted when the fuse is replaced.
If you lose the fuse cover the plug must not be used until a replacement cover is obtained.
A replacement fuse cover can be purchased from your local Panasonic Dealer.

IF THE FITTED MOULDED PLUG IS UNSUITABLE FOR THE SOCKET OUTLET IN YOUR HOME THEN THE FUSE SHOULD BE REMOVED AND THE PLUG CUT OFF AND DISPOSED OF SAFELY.
THERE IS A DANGER OF SEVERE ELECTRICAL SHOCK IF THE CUT OFF PLUG IS INSERTED INTO ANY 13 AMP SOCKET.

If a new plug is to be fitted please observe the wiring code as shown below.
If in any doubt please consult a qualified electrician.

IMPORTANT

The wires in this mains lead are coloured in accordance with the following code:

Blue:	Neutral
Brown:	Live

As the colours of the wires in the mains lead of this appliance may not correspond with the coloured markings identifying the terminals in your plug, proceed as follows:
The wire which is coloured BLUE must be connected to the terminal in the plug which is marked with the letter N or coloured BLACK.

The wire which is coloured BROWN must be connected to the terminal in the plug which is marked with the letter L or coloured RED.

Under no circumstance should either of these wires be connected to the earth terminal of the three pin plug, marked with the letter E or the Earth Symbol ⏚.

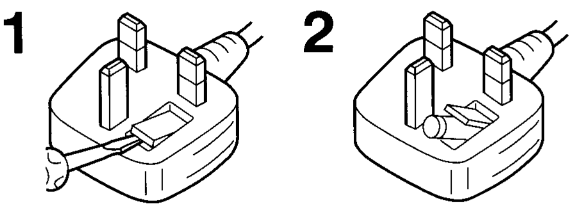
How to replace the Fuse

- There are two types of the AC Mains Lead assembly: **A** and **B** as shown below.

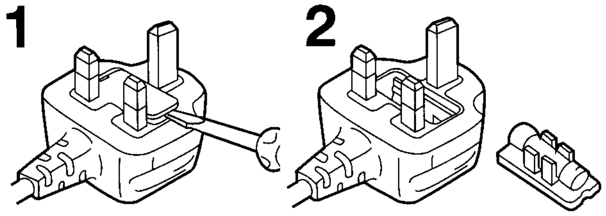
1 Open the fuse compartment with a screwdriver.

2 Replace the fuse and fuse cover.

TYPE A



TYPE B



3 ADJUSTMENT PROCEDURES

3.1. DISASSEMBLY METHOD

3.1.1. DISASSEMBLY FLOW CHART

This flow chart indicates disassembly steps of the cabinet parts and the circuit boards in order to find the necessary items for servicing.

When reassembling, perform the steps in the reverse order.

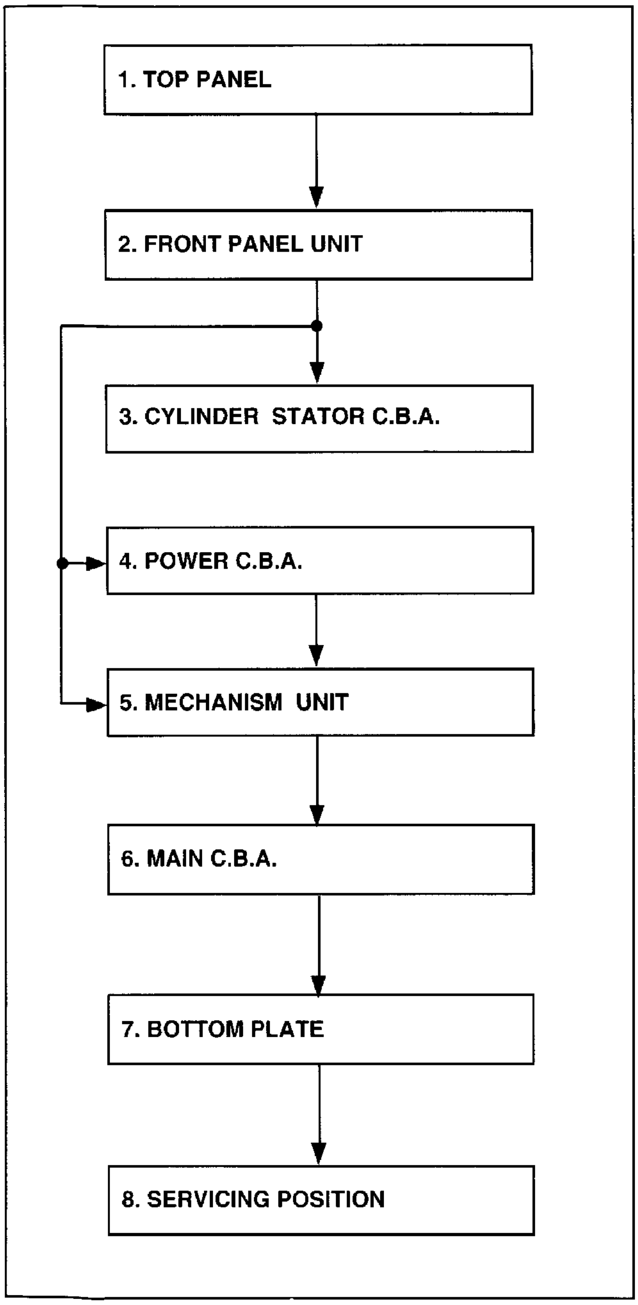

1. TOP PANEL
2. FRONT PANEL UNIT
3. CYLINDER STATOR C.B.A.
4. POWER C.B.A.
5. MECHANISM UNIT
6. MAIN C.B.A.
7. BOTTOM PLATE
8. SERVICING POSITION

Fig. D1

3.1.2. DETAIL OF DISASSEMBLY METHOD

1. REMOVAL OF THE TOP PANEL

Remove	4 Screws (A)

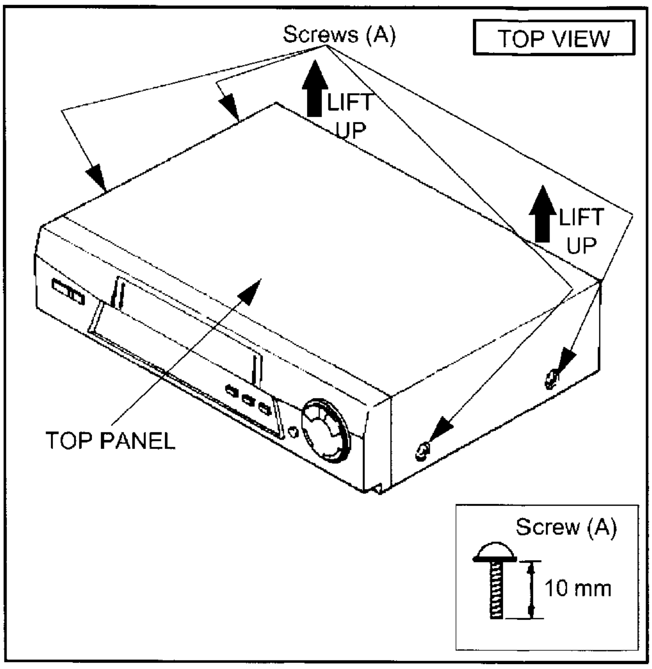

Screws (A)
TOP VIEW
LIFT UP
LIFT UP
TOP PANEL
Screw (A)
10 mm

Fig. D2

2. REMOVAL OF THE FRONT PANEL UNIT

Unlock	7 Tabs (B)

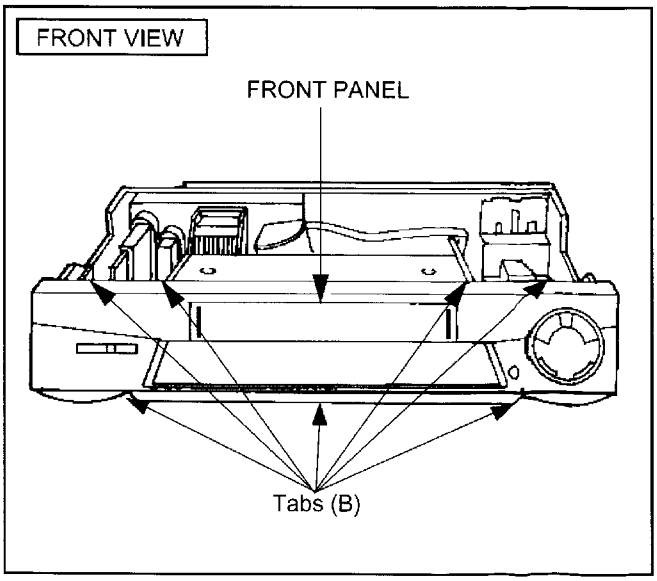

FRONT VIEW
FRONT PANEL
Tabs (B)

Fig. D3

3. REMOVAL OF THE CYLINDER STATOR C.B.A.

Remove	2 Screws (C)
Disconnect	Flat Card Cable (D)

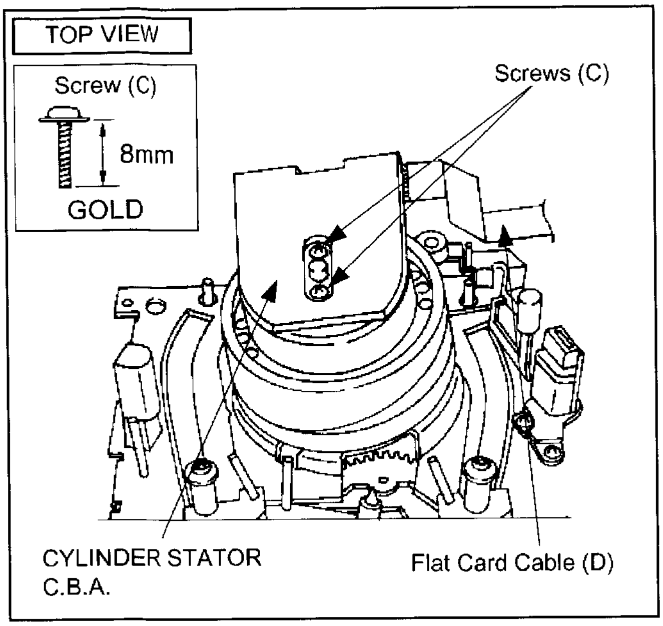

TOP VIEW
Screw (C)
8mm
GOLD
Screws (C)
CYLINDER STATOR C.B.A.
Flat Card Cable (D)

Fig. D4

4. REMOVAL OF THE POWER C.B.A.

Disconnect	Bridge Connector (E)
Unlock	6 Tabs (F)

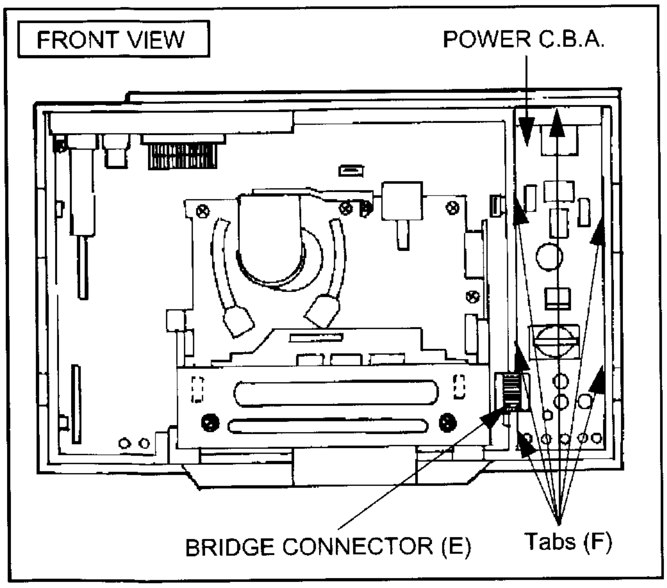

FRONT VIEW
POWER C.B.A.
BRIDGE CONNECTOR (E)
Tabs (F)

Fig. D5

COUTIONS:

Please pay an attention to disconnect the connector (P1001-P1103) which connected between Main C.B.A. and Power supply unit as shown below.

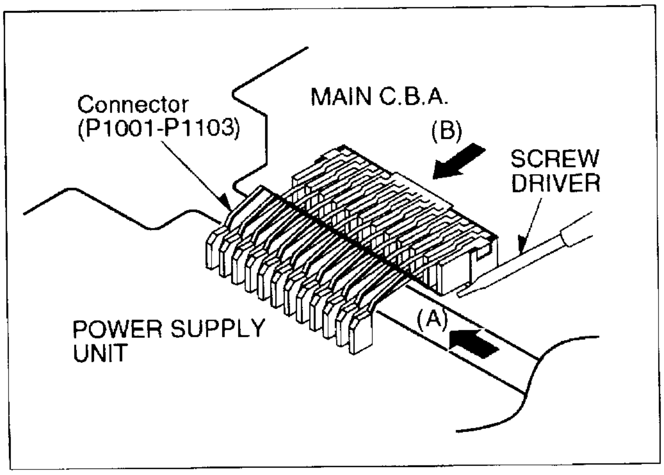

Connector
(P1001-P1103)
MAIN C.B.A.
(B)
SCREW DRIVER
POWER SUPPLY UNIT
(A)

Fig. D6

As above drawing, disconnect the connector by SCREW DRIVER from the direction (A).

Do not disconnect from direction (B) because it is possibility to damage the parts located by the connector.

5. REMOVAL OF THE MECHANISM UNIT

Remove	3 Screws (G)
Remove	2 Screws (H)
Remove	Screw (I)

NOTE :

Keep pressing 2 stoppers on the Cassette Holder Plate and press the Cassette Holder Plate to the rear.

[CAUTION -Mounting the Mechanism unit to Main C.B.A.]

a. **When assembling, insert the Cylinder Flexible card to the Connector (P3502) carefully, to avoid any damage.**

b. **Be sure to tighten the Screw (I), otherwise, S/N ration may become worse.**

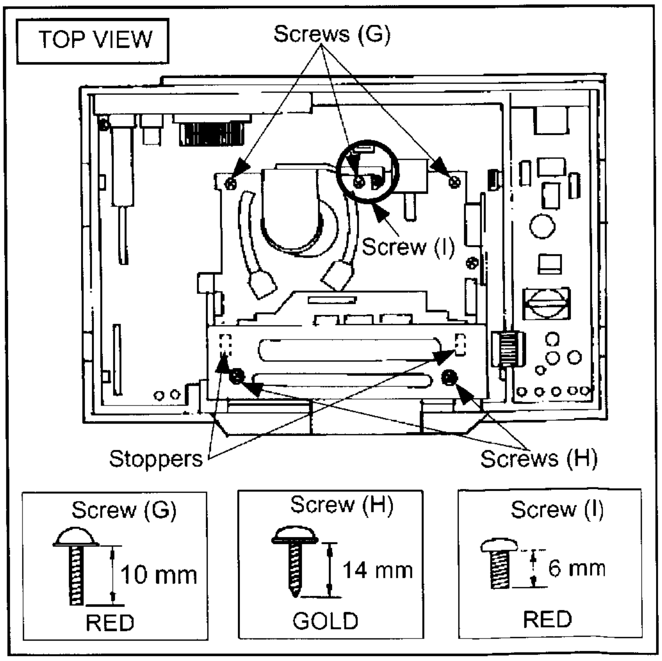

TOP VIEW
Screws (G)
Screw (I)
Stoppers
Screws (H)
Screw (G)
10 mm
RED
Screw (H)
14 mm
GOLD
Screw (I)
6 mm
RED

Fig. D7-1

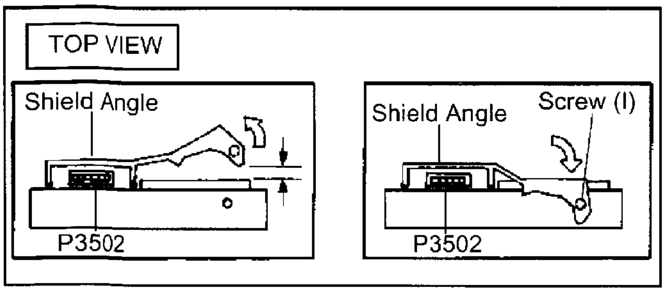

TOP VIEW
Shield Angle
P3502
Shield Angle
Screw (I)
P3502

Fig. D7-2

6. REMOVAL OF THE MAIN C.B.A.

Disconnect	Bridge Connector (E)
Remove	Screw (J)
Unlock	7 Tabs (K)

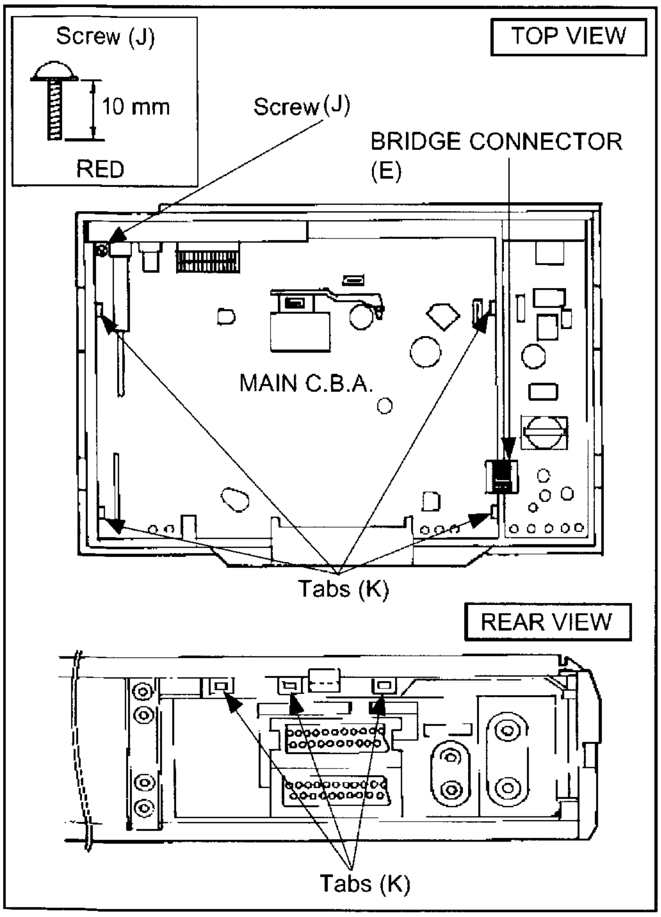

Screw (J)
10 mm
RED
TOP VIEW
Screw(J)
BRIDGE CONNECTOR
(E)
MAIN C.B.A.
Tabs (K)
REAR VIEW
Tabs (K)

Fig. D8

7. REMOVAL OF THE BOTTOM PLATE

Unlock	10 Tabs (L)

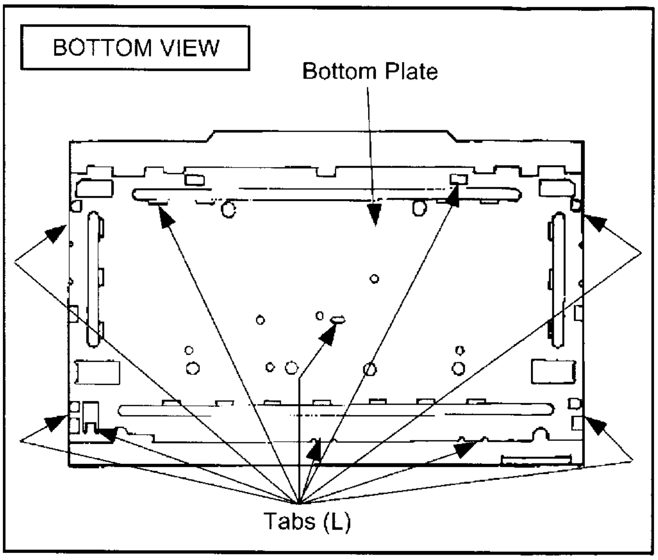

BOTTOM VIEW
Bottom Plate
Tabs (L)

Fig. D9

8. SERVICING POSITION

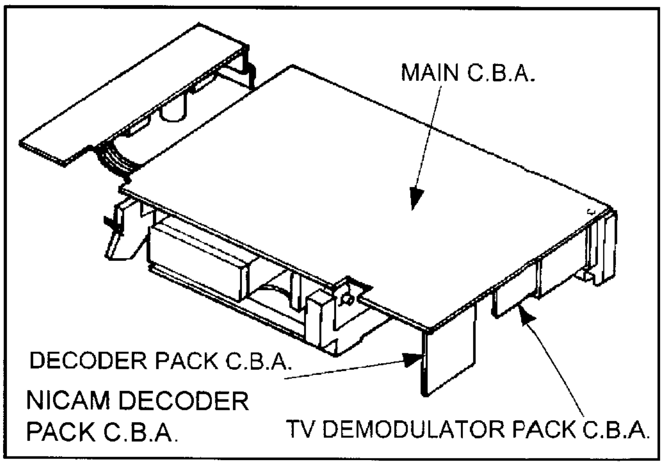

MAIN C.B.A.
DECODER PACK C.B.A.
NICAM DECODER
PACK C.B.A.
TV DEMODULATOR PACK C.B.A.

Fig. D10

3.2. MECHANICAL ADJUSTMENT PROCEDURES

Refer to the Service Manual for Z-Mechanism Chassis. (Order No. VRD9802005C2)

3.3. ELECTRICAL ADJUSTMENT PROCEDURES

3.3.1. TEST EQUIPMENT

The following equipments are required for Electrical Adjustments.

1. Dual-Trace Oscilloscope
    - Voltage Range: 0.005-5V/div
    - Frequency Range: DC-35MHz
    - Probes: 10:1 / 1:1
2. Frequency Counter
    - Frequency Range: 0-10MHz
    - Probes: 1:1
3. Universal Counter
4. Digital Volt Meter (D.V.M.)
5. Video Sweep Generator
6. Sinewave Generator
7. Video Pattern Generator
8. Monitor TV
9. DC Power Supply
10. VHS Blank Tape
11. VHS Alignment Tape
    - Parts No.: VFJ8125H3F(PAL)

3.3.2. VCR SETTING

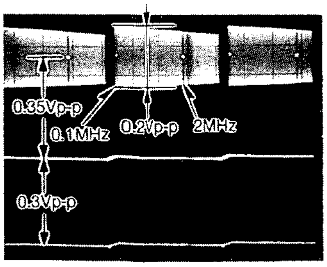
When no indication in the procedure, set each selector as follows.

1. TAPE SPEED: SP
2. CHANNEL: AV1/AV2/AV3
   (Set to signal input terminal number)

3.3.3. ADJUSTMENTS

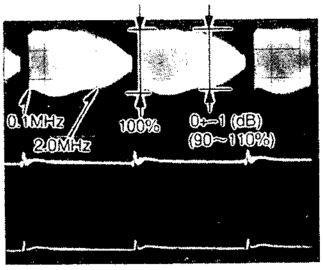
ITEM	TP	ADJ.	MODE	INPUT	TAPE	M. EQ.	SPEC.	REMARKS
PG SHIFTER ADJUSTMENT	---	---	PLABACK	---	ALIGNMENT TAPE (PAL)	---	---	Refer to the procedure of PG SHIFTER ADJUSTMENT as shown in Fig.E3.
VIDEO FREQUENCY RESPONSE ADJUSTMENT	VIDEO OUT	---	SP/LP PLAYBACK (SELF-REC)	VIDEO SWEEP (See Fig.E1)	BLANK TAPE	OSCILLO SCOPE/ VIDEO SWEEP GENERATOR	SP: 0+-1 (dB) (90~110%) LP: 0+-1 (dB) (90~110%) (See Fig. E2)	Refer to the procedure of VIDEO FREQUENCY RESPONSE ADJUSTMENT as shown in Fig. E5.
AI FUNCTION ADJUSTMENT	---	---	PLAYBACK (SELF-REC)	PAL COLOUR BAR	BLANK TAPE	---	---	Refer to the procedure of AI FUNCTION ADJUSTMENT as shown in Fig.E4.

Fig.E1



CONDITION :
BURST SIGNAL OFF
75 ohm TERMINATED

Fig.E2



3.3.4. PG SHIFTER ADJUSTMENT (AUTOMATIC)

PROCEDURES	FIP Display
Press the FF and EJECT buttons simultaneously for 3 seconds.	0 00 00
Press the FF and EJECT buttons simultaneously twice.	2 00 00
Press the EJECT key for 3 seconds.	2 00 00
Press the CH UP key once.	2 01 00
Insert the Alignment Tape. (PAL: VFJ81215H3F)	2 01 00
This adjustment is automatically started. (During the adjustment, the picture will be appeared on the monitor.)	2 01 00

When this Adjustment is terminated, the following operation will be activated.

- Adjustment completed: The tape will be ejected.
- Adjustment incompleted: "F2*" is indicated on the FIP.Check the Servo/System Control circuit and Cylinder Unit.

To release Service Mode, press EJECT key and key Simultaneously 6 times until the FIP becomes normal indication.

Fig. E3

3.3.5. AI FUNCTION ADJUSTMENT (AUTOMATIC)

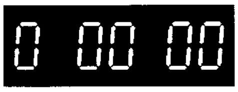
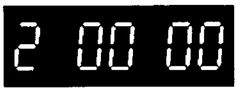
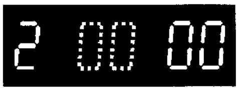
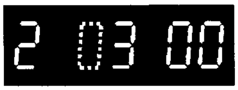
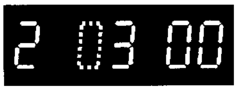
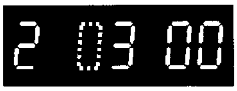
PROCEDURES	FIP Display
Press the FF and EJECT buttons simultaneously for 3 seconds.	
Press the FF and EJECT buttons simultaneously twice.	
Press the EJECT key for 3 seconds.	
Press the CH UP key 3 times.	
Insert the Blank Tape.	
This adjustment is automatically started.	
When this Adjustment is terminated, the following operation will be activated. • Adjustment completed: The VCR goes to STOP Mode.	
To release Service Mode, press EJECT key and key Simultaneously 6 times until the FIP becomes normal indication.	

Fig. E4

3.3.6. VIDEO FREQUENCY RESPONSE ADJUSTMENT

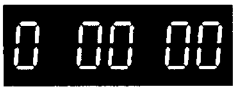
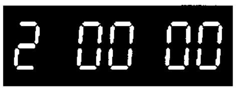
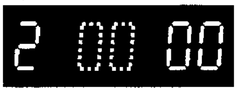
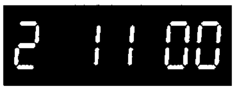
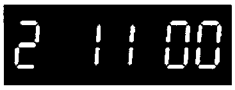
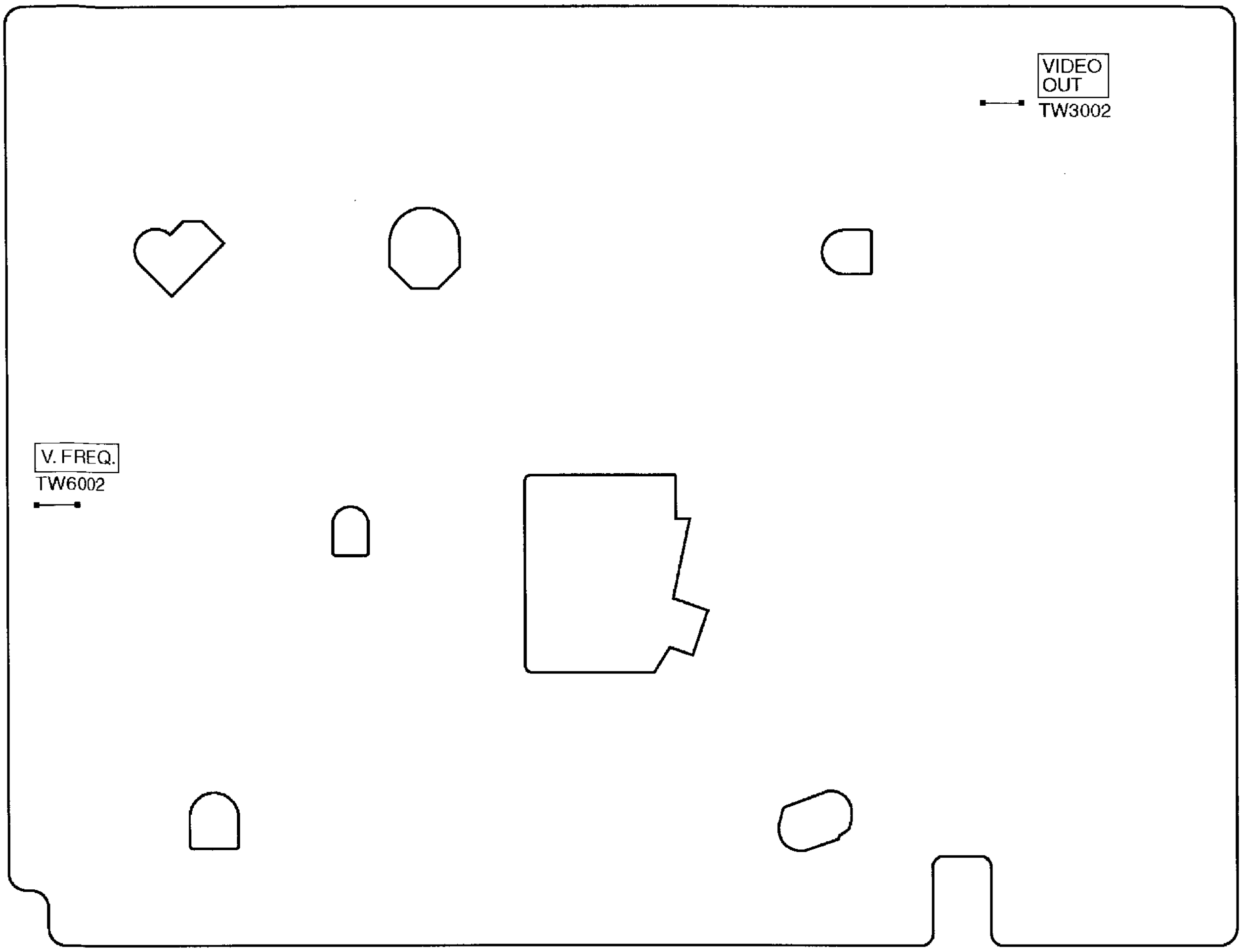
PROCEDURES	FIP Display
Set the Video Sweep signal (See Fig.E1)	
Make the self-recording tape.	
Press the FF and EJECT Buttons simultaneously for 3 seconds.	
Press the FF and EJECT Buttons simultaneously twice.	
Press the EJECT key for 3 seconds.	
Press the CH UP and/or CH DOWN key until "11" is displayed on the FIP.	
Insert the Self-recorded tape and playback it.	
Connect the Oscilloscope to: *CH1... Video Out.(TW3002). *CH2... V.FREQ. (TW6002).	
Press the "4" key on the Remote Controller. (Confirm that TW6002 becomes high (5V).)	
Adjust the Frequency response by pressing the "2" (increase) and/or "8"(decrease) key on the Remote Controller.	
Store the Adjusted value by pressing "5" key on the Remote Controller.	
Release the Service mode by pressing the EJECT and FF keys simultaneously 6 times until the FIP becomes normal indication.	

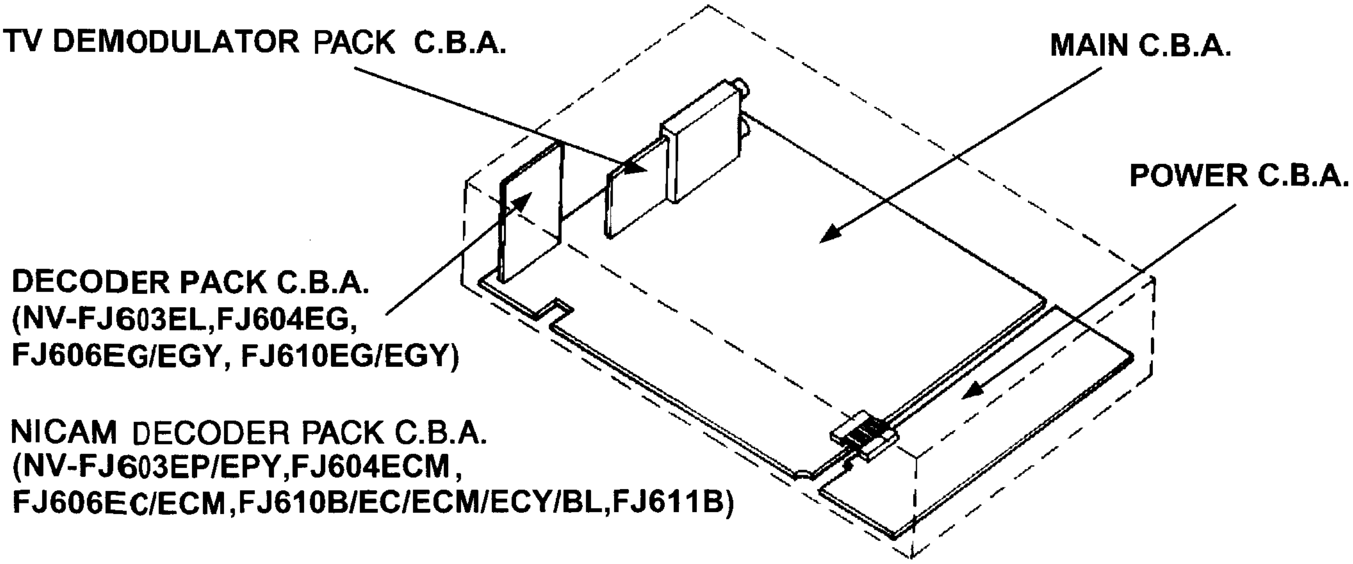
Fig. E5

3.3.7. LOCATION OF TEST POINTS & CONTROLS

MAIN C.B.A.


VIDEO OUT
TW3002
V. FREQ.
TW6002

3.3.8. CIRCUIT BOARD LAYOUT


TV DEMODULATOR PACK C.B.A.
MAIN C.B.A.
POWER C.B.A.
DECODER PACK C.B.A.
(NV-FJ603EL,FJ604EG,
FJ606EG/EGY, FJ610EG/EGY)
NICAM DECODER PACK C.B.A.
(NV-FJ603EP/EPY,FJ604ECM,
FJ606EC/ECM,FJ610B/EC/ECM/ECY/BL,FJ611B)

4 ABBREVIATIONS

443NT [L]	4.43 NTSC Ⓛ
A. COMP	AUDIO COMPONENT SIGNAL
A. COMPO	AUDIO COMPONENT SIGNAL
A. D.P [L]	AUDIO DUBBING PAUSE Ⓛ
A. D/L [L]	AUDIO DUBBING PAUSE Ⓛ
A. DEF [S]	AUDIO DEFEAT
A.DEF [S] [L]	AUDIO DEFEAT
A. DUB P [L]	AUDIO DUBBING PAUSE Ⓛ
A. DUB [H]	AUDIO DUBBING Ⓗ
A. ERASE	AUDIO ERASE
A. H. SW	AUDIO HEAD SWITCHING PULSE
A. HEAD [R]	AUDIO HEAD (REC)
A. HEAD [W]	AUDIO HEAD (PLAY)
A. IN [L]	AUDIO INPUT (L)
A. IN [R]	AUDIO INPUT (R)
A. MUT [H]	AUDIO MUTE Ⓗ
A. MUTE [H]	AUDIO MUTE Ⓗ
A. OUT [L]	AUDIO OUTPUT (L)
A. OUT [R]	AUDIO OUTPUT (R)
A. RF OUT	AUDIO RF SIGNAL OUTPUT
A/VS/S. DATA	AV SW/SERIAL DATA
AC ONLINE	AC ONLINE
AC. O/EE. H	AC ONLINE/EE Ⓗ
AFC S C	AFC S CURVE
AFC [S]	AFC S CURVE
AFC. DEF	AFC DEFEAT
ARFC OUT	AUDIO RF SIGNAL OUTPUT
ART. V	ARTIFICIAL VERTICAL SYNC SIGNAL
ART. V. MM	ARTIFICIAL VERTICAL SYNC SIGNAL MONO MULTI
ART. V/H/N	ARTIFICIAL VERTICAL SYNC SIGNAL Ⓗ / NORMAL
AT. V/H/N	ARTIFICIAL VERTICAL SYNC SIGNAL
ATSW/TEST/NOR/SE	TEST/NORMAL/SERVICE
AUDIO IN [L]	AUDIO INPUT (L)
AUDIO IN [R]	AUDIO INPUT (R)
AUDIO OUT [L]	AUDIO OUTPUT (L)
AUDIO OUT [R]	AUDIO OUTPUT (R)
AUDIO SELECT [H]	AUDIO SELECT Ⓗ
AUDIO. L	AUDIO (L)
AUDIO. R	AUDIO (R)
AV CNT	AV CONTROL
AV CTL	AV CONTROL
AV CTL/S. CLK	AV CONTROL/SERIAL CLOCK
AV. C.M.	AV CONTROL MODE
AVCNT/METER. R	AV CONTROL/LEVEL METER(R)
AVSW/METER. L	AV SW/LEVEL METER (L)
B MODE. H	B MODE Ⓗ
B.G.P	BURST GATE PULSE
BACKUP 5V	BACK UP 5V
BAND. U.E.	BAND U
BANDVL. D	BAND VL
BI/MI [L]	BILINGUAL/MIX Ⓛ
BIL	BILINGUAL
BIL [L]	BILINGUAL Ⓗ

BIL. [H]	BILINGUAL Ⓗ
BIL/M1[L]	BILINGUAL Ⓛ
BS CLOCK	BS CLOCK
BS DATA	BS DATA
BS LCH IN	BS L CHANNEL INPUT
BS MIX [H]	BS MIX Ⓗ
BS MON [H]	BS MONITOR Ⓗ
BS MONI [H]	BS MONITOR Ⓗ
BS RCH IN	BS R CHANNEL INPUT
BS VIDEO	BS VIDEO SIGNAL
BS VIDEO/BS1	BS VIDEO SIGNAL
BS [H]	BS Ⓗ
BS. LEVEL	BS LEVEL
BS. M [H]	BS MONITOR Ⓗ
BS/VTR [H]	BS/VTR Ⓗ
BUS CLK	BUS CLOCK
BUS LSN	BUS LISTEN
BUS TLK	BUS TALK
BUZZER	BUZZER
CAP EC	CAPSTAN TORQUE CONTROL
CAP M GND	CAPSTAN MOTOR GND
CAP. ET	CAPSTAN TORQUE CONTROL
CAP. FG1	CAPSTAN FG1 PULSE
CAP. FG2	CAPSTAN FG2 PULSE
CAS. SW	CASSETTE SW
CCN	PLAYBACK CONTROL SIGNAL (–)
CCP	PLAYBACK CONTROL SIGNAL (+)
CHM	CONTROL SIGNAL (+)
CHP	CONTROL SIGNAL (–)
CINEM [L]	CINEMA Ⓛ
CINEMA [L]	CINEMA Ⓛ
CINEMA/MIX	CINEMA/MIX
CKL	RATCH LOCK
CKS	SHIFT LOCK
CL	CLOCK
CLK	CLOCK
CLK (C.G)	CLOCK
CLOCK. IN	CLOCK INPUT
CLP	CLAMP
COL/B/W/NOR	COLOUR/BLACK & WHITE/NORMAL
COLOR [H]	COLOUR Ⓗ
CONV	CONVERTOR
CS	CHIP SELECT
CTL GND	CONTROL GND
CTL HEAD [+]	CONTROL HEAD (+)
CTL HEAD [–]	CONTROL HEAD (–)
CTL[+]	CONTROL HEAD (+)
CTL[–]	CONTROL HEAD (–)
CUE BIAS	CUE BIAS
CURRENT LIM	CURRENT LIMITER
CYL ET	CYLINDER TORQUE CONTROL
CYL GND	CYLINDER GND
D.F.M. REC [H]	DELAYED FM RECORDING Ⓗ
D. FM REC [L]	DELAYED FM RECORDING Ⓛ
D. GND	DIGITAL GND

D. REC [H]	DELAYED RECORDING Ⓗ
D4/S. LED	D4/STILL LED
D4/STILLED	D4/STILL LED
DAC [CLK]	TUNER DAC (CLOCK)
DAC/FSCS	TUNER DAC/FS CHIP SELECT
DAREC [H]	DELAYED AUDIO RECORDING Ⓗ
DATA	DATA
DECODER [L]	DECODER (L)
DECODER [R]	DECODER (R)
DEW	DEW
DEW SNS	DEW SENSOR
DFMRE [H]	DELAYED FM AUDIO RECORDING Ⓗ
E. REC 5V	EXCEPT RECORDING 5V
EC	ERROR TORQUE CONTROL
ECR	ERROR TORQUE CONTROL REFERENCE VOLTAGE
EDT TRIG [L]	EDIT TRIGGER Ⓛ
EDIT [H]	EDIT Ⓗ
EE [H]	EE Ⓗ
EE [H]/INS [M]	EE Ⓗ/INSERT Ⓜ
EE. VV. TR	EE/VV/TRICK PLAY
EJECT. PO	EJECT POSITION
EJECT/VDET	EJECT/REVERSE SLOW LOCK
ENV. SEL	ENVELOPE SELECT
ENVE. OUT	ENVELOPE OUTPUT
ENVE. SEL	ENVELOPE SELECT
ENV SELECT	ENVELOPE SELECT
EP [H]	LP Ⓗ
EP/LP [H]	LP Ⓗ
EP/ LP/SP	LP/SP
EP/SS [H]	LP/SLOW/STILL/STOP Ⓗ
EPROMCS	EPROM CHIP SELECT
EX. REC 5V	EXCEPT RECORDING 5V
FF/REW [L]	FAST FORWARD/REWIND Ⓛ
FG1 IN	FG1 PULSE INPUT
FG2 IN	FG2 PULSE INPUT
FILTER ADJ.	FILTER ADJUSTMENT
FLY ERASE [H]	FLYING ERASE HEAD ON Ⓗ
FLY ON [H]	FLYING ERASE HEAD ON Ⓗ
FLY. E [H]	FLYING ERASE HEAD ON Ⓗ
FM MUT [H]	FM AUDIO MUTE Ⓗ
FM MUTE [H]	FM AUDIO MUTE Ⓗ
FM OUT [L]	FM OUTPUT (L)
FM OUT [R]	FM OUTPUT (R)
FM PACK OUT [L]	FM PACK OUTPUT (L)
FM PACK OUT [R]	FM PACK OUTPUT (R)
FM/BS SEL [L]	FM/BS SELECT (L)
FM/BS SEL [R]	FM/BS SELECT (R)
FS. CLK	FS CLOCK
FUL. E [H]	FULL ERASE HEAD ON Ⓗ
FULL. E [H]	FULL ERASE HEAD ON Ⓗ
FULL. E. 12V	FULL ERASE 12V
GND [A]	GND (ANALOGUE)
GND [TU]	GND (TUNER)
GND/N. SW. 12V	GND/NON SW 12V

H.SYNC	HORIZONTAL SYNC
H. AMP. SW	HEAD AMP SW PULSE
H. P <R>	HEAD PHONE (R)
H. P <L>	HEAD PHONE (L)
H. P GND	HEAD PHONE GND
H. P OUT [L]	HEAD PHONE OUTPUT (L)
H. P OUT [R]	HEAD PHONE OUTPUT (R)
H. SW	HEAD SW PULSE
HEAD PHONE [L]	HEAD PHONE (L)
HEAD PHONE [R]	HEAD PHONE (R)
HEAD SW	HEAD SW
HEATER [+]	HEATER (+)
HEATER [–]	HEATER (–)
HSS	HORIZONTAL SYNC SIGNAL
HTR [+]	HEATER (+)
HTR [–]	HEATER (–)
I RFE	REFERENCE CURRENT
ICL	CONTROL AGC CIRCUIT
IF	INTERMEDIATE FREQUENCY
IN SELA 1	INPUT SELECT A1 POSITION
IN SELA 2	INPUT SELECT A2 POSITION
IN SELA 3	INPUT SELECT A3 POSITION
INS L/R [L]	INSERT Lch/Rch Ⓛ
INS. [H]	INSERT Ⓗ
INSEL A1	INPUT SELECT A1 POSITION
INSEL A2	INPUT SELECT A2 POSITION
INSERT	INSERT
INSERT [H]	INSERT Ⓗ
IO CS	INPUT/OUTPUT CHIP SELECT
JOG1	JOG1
JOG S3 LED/FOWRD	JOG LED/FORWARD LED
JOG/F. LED	JOG LED/FORWARD LED
JSB [H]	JSB Ⓗ
JST. CLCK	JUST CLOCK
JST. CLK	JUST CLOCK
JST. CLOCK	JUST CLOCK
L. OUT	Lch OUTPUT
L. CH [H]	Lch Ⓗ
L. CH [L]	Lch Ⓛ
LED (MAIN)	LED (MAIN)
LED (STEREO)	LED (STEREO)
LED (SUB)	LED (SUB)
LED CKL	LED SERIAL CLOCK
LED CKS	LED SERIAL CLOCK
LED DATA	LED SERIAL DATA
LINE IN 1 [L]	LINE INPUT 1 (L)
LINE IN 1 [R]	LINE INPUT 1 (R)
LINE IN 2 [L]	LINE INPUT 2 (L)
LINE IN 2 [R]	LINE INPUT 2 (R)
LINE IN V	LINE INPUT VIDEO
LINE IN [L]	LINE INPUT (L)
LINE IN [R]	LINE INPUT (R)
LINE OUT [L]	LINE OUTPUT (L)
LINE OUT [R]	LINE OUTPUT (R)
LP [H]	LP Ⓗ

LPTRI [L]	LP TRICK PLAYⓁ	P. OFF [L]	POWER OFF Ⓛ
Lch/A. DUB	Lch/AUDIO DUBBING	PAL [H]	PAL Ⓗ
M GND	MOTOR GND	PAL [L]/NTSC [H]	PAL Ⓛ/NTSC Ⓗ
M REG	MOTOR REGULATOR	PB ADJ. OUT	PLAYBACK ADJUST OUTPUT
MAIN OUT	MAIN OUTPUT	PB OUT	PLAYBACK OUTPUT
MAIN [L]	MAINⓁ	PB. H	PLAYBACKⒽ
MAIN/MONO	MAIN/MONAURAL	PFG	PG/FG
MAX IN	MAXIMUM INPUT	PHOTSN 1B	PHOTO SENSOR 1B
MES [H]	MESECAMⒽ	PICT. CNT	PICTURE CONTROL
MESE [H]	MESECAMⒽ	PLAY LED/RVS LED	PLAY LED/REVERSE LED
MESE [L]	MESECAMⒽ	PLAY. PO	PLAY POSITION
METER 5V	LEVEL METER 5V	PLAY/R.LED	PLAY LED/REVERSE LED
METER [L]	LEVEL METER (L)	PLY/DEW	PLAY/DEWⒽ
METER [R]	LEVEL METER (R)	POWER OFF [L]	POWER OFFⓁ
METER. L/AVS	LEVEL METER (L)	PREROLL [H]	PREROLLⒽ
METER. R/AVC	LEVEL METER (R)	PWRFAIL	POWER FAILURE DETECT
MI/BI [L]	MIXⒽ/BILINGUAL	R. CH [H]	RchⒽ
MIC GND	MIC GND	R. CH [L]	RchⓁ
MIC IN	MIC INPUT	R. ST	RESET
MIC IN [L]	MIC INPUT (L)	R/S/F	REVERSE Ⓗ/STOP Ⓜ/FORWARD Ⓛ
MIC IN [R]	MIC INPUT (R)	RCH [H]	RchⒽ
MIC [H]	MICⒽ	REC 12V	RECORDING 12V
MIX [H]	MIXⒽ	REC CHROMA	RECORDING CHROMINANCE SIGNAL
MIX [H]/CINEMA [L]	MIXⒽ/CINEMA SOUNDⓁ	REC H	RECORDINGⒽ
MIX/ CINE	MIXⒽ/CINEMA SOUNDⓁ	REC IN	RECORDING INPUT
MIX/CINEMA [L]	MIXⒽ/CINEMA SOUNDⓁ	REC OUT [L]	RECORDING OUTPUTⓁ
MN. H/M. L	MONAURALⒽ/MAINⓁ	REC START	RECORDING START
MN. H/MAI. L	MONAURALⒽ/MAINⓁ	REC VR [C]	RECORDING VOLUME (COMMON)
MN2/MES. L	MONAURAL 2/MESECAMⓁ	REC VR [L]	RECORDING VOLUME (L)
MODE SEL	AUDIO MODE SELECT	REC VR [R]	RECORDING VOLUME (R)
MODE SW	AUDIO MODE SW	REC Y	RECORDING LUMINANCE SIGNAL
MODE. S. IN	AUDIO MODE SELECT INPUT	REC [H]	RECORDINGⒽ
MODE. S. OUT	AUDIO MODE SELECT OUTPUT	REC. C	RECORDING CHROMINANCE SIGNAL
MONO [H]	MONAURALⒽ	REC. Y	RECORDING LUMINANCE SIGNAL
MONO [H]/MAIN [L]	MONAURALⒽ/MAINⓁ	REC/EE CTL	RECORDING/EE CONTROL
MONO2 [L]	MONAURAL 2 Ⓛ	REEL-T	REEL PULSE(TAKE-UP)
MONO2/MESE[FM(L)]	MONAURAL 2/MESECAM (FM Ⓛ)	REEL-S	REEL PULSE (SUPPLY)
MOTOR GND	MOTOR GND	REGULATOR FILTER	REGULATOR FILTER
MUTE	MUTE	RESET	RESET
N. A. REC [L]	NORMAL AUDIO RECORDINGⓁ	REV M F/R	REVIEW MOTOR FORWARD/REVERSE
N. SW 12V	NON SW 12V		
N. SW. 5. DET	NON SW 5V DETECT	REV M V1	REVIEW MOTOR V1
NICAM	NICAM	REV M V2	REVIEW MOTOR V2
NICAM [L]	NICAMⓁ	REV MOTOR F/R	REVIEW MOTOR FORWARD/REVERSE
NOL [H]	PALⒽ/4.43 NTSC Ⓜ/3.58 NTSC Ⓛ		
NOR/SOFT [H]	NORMAL/SOFT TAPE PLAYⒽ	REV MOTOR V1	REVIEW MOTOR V1
NORMAL [H]	NORMALⒽ	REV MOTOR V2	REVIEW MOTOR V2
NR BIAS	NR BIAS	REV MOTOR [+]	REVIEW MOTOR (+)
NTSC [L]	NTSCⓁ	REV MOTOR [–]	REVIEW MOTOR (–)
OCH	CONTROL AGC CIRCUIT	REV. M. GND	REVIEW MOTOR GND
OUT	OUTPUT	RF.CHROMA	RF CHROMINANCE SIGNAL
P-OFF [H]	POWER OFFⒽ	RF OUT	RF OUTPUT
P-OFF [L]	POWER OFFⓁ	RF Y	RF LUMINANCE SIGNAL
P. FAIL	POWER FAILURE DETECT	RF. Y. IN	RF LUMINANCE SIGNAL INPUT
P. OFF [H]	POWER OFFⒽ	RF. Y. OUT	RF LUMINANCE SIGNAL OUTPUT

ROTAR. SW	ROTARY SW
ROTARY	ROTARY SW
RST	RESET
RST [L]	RESET Ⓛ
Rch/INST	Rch/INSERT
S IN	SERIAL DATA INPUT
S OUT	SERIAL DATA OUTPUT
S-PHOTO	SUPPLY PHOTO TRANSISTOR
S-RL. PLS	SUPPLY REEL PULSE
S. CLK	SERIAL CLOCK
S. CLK/AV	SERIAL CLOCK/AV
S. DATA	SERIAL DATA
S. DATA/A	SERIAL DATA / AUDIO
S. PHOTO	SUPPLY PHOTO TRANSISTOR
S.TAB [L]	SAFETY TAB SW ON Ⓛ
S/P/N	SECAM/PAL/NTSC
SC IN	SERIAL CLOCK INPUT
SC OUT	SERIAL CLOCK OUTPUT
SCK SELECT	SERIAL CLOCK SELECT
SEL OUT [L]	SELECT OUTPUT (L)
SEL OUT [R]	SELECT OUTPUT (R)
SHUTTLE 1	SHUTTLE 1
SIF	SOUND INTERMEDIATE FREQUENCY
SLMUT [H]	INPUT SELECT MUTE Ⓗ
SLNID [+]	SOLENOID (+)
SLNID [–]	SOLENOID (–)
SLW TR. MM	SLOW TRACKING MONO MULTI
SLW TR. REF	SLOW TRACKING REFERENCE VOLTAGE
SNS. GND	SENSOR GND
SOFT [H]	SOFT TAPE PLAY Ⓗ
SOFT [H]/NORMAL	SOFT TAPE PLAY Ⓗ/NORMAL Ⓗ
SOLENOID ON [L]	SOLENOID ON Ⓛ
SP [H]	SP Ⓗ
SP/L/SLP	SP/LP
SSS [L]	SLOW/STILL/STOP Ⓛ
STEREO LED	STEREO LED
STEREO [H]	STEREO Ⓗ
STEREO [L]	STEREO Ⓛ
STOP. PO	STOP POSITION
STOP/5V	STOP POSITION/5V
STOP1/TAPE SEL	STOP1 POSITION/TAPE SELECT
STOP1/PAL : ST	STOP 1 POSITION/PAL
STOP2. PO	STOP 2 POSITION
STOP2 / S-TAB	STOP POSITION/SAFETY TAB SW
STREO [H]	STEREO Ⓗ
SUB BIAS	SUB BIAS
SUB. SW	SUB SW
SVHS CAS [L]	S-VHS CASSETTE Ⓛ
SW. 5. DET	SW 5V DETECT
SYNC [L]	SYNC Ⓛ
SYSCON 5V	SYSTEM CONTROL 5V
SYSTEM	SYSTEM SW
T-PHOTO	TAKE-UP PHOTO TRANSISTOR
T-RL. PLS	TAKE-UP REEL PULSE
T. BUSCLK	TIMER BUS CLOCK
T. BUSLSN	TIMER BUS LISTEN
T. BUSTLK	TIMER BUS TALK
T. END [L]	TAPE END Ⓛ
T. PHOTO	TAKE-UP PHOTO TRANSISTOR
TAPE END [L]	TAPE END Ⓛ
TAPE END [L]/CAM	TAPE END Ⓛ/CAMERA PAUSE
TEST	TEST MODE
TPZ	TRAPEZOIDAL WAVE CIRCUIT
TRIC [L]	TRICK PLAY Ⓛ
TRICK [L]	TRICK PLAY Ⓛ
TRK. ENV	AUDIO TRACKING ENVELOPE DETECT
TU. AUDIO	TUNER AUDIO
TU. GND	TUNER GND
TU. V. IN	TUNER VIDEO SIGNAL INPUT
TU. VIDEO	TUNER VIDEO
TUN NOR IN	TUNER NORMAL INPUT
TUN R	TUNER AUDIO (R)
TUN. AUDIO IN	TUNER AUDIO INPUT
TUNER 12V	TUNER 12V
TUNER L	TUNER AUDIO (L)
TUNER V IN	TUNER VIDEO SIGNAL INPUT
TUNER [L]	TUNER AUDIO (L)
TUNER [N]	TUNER AUDIO (NORMAL)
TUNER [R]	TUNER AUDIO (R)
TUNER. 12	TUNER 12V
TUOFF [H]	TUNER OFF Ⓗ
TV. AUDIO	TV AUDIO
TV/VTR	TV/VTR
TXTON [L]	TEXT ON Ⓛ
U. REG45V	UNREGULATOR 45V
UNREG	UNREGULATOR
UNREG 19V	UNREGULATOR 19V
V. REF	REFERENCE VOLTAGE
V. EE [H]	VIDEO EE Ⓗ
V. EE [L]	VIDEO EE Ⓛ
VCO REF	REFERENCE OSCILLATOR
VD. IN	VIDEO SIGNAL INPUT
VD. OUT	VIDEO SIGNAL OUTPUT
VIDEO EE [L]	VIDEO EE Ⓛ
VIDEO IN	VIDEO SIGNAL INPUT
VIDEO OUT	VIDEO SIGNAL OUTPUT
VM	MOTOR VOLTAGE
VM DOWN [L]	MOTOR VOLTAGE DOWN Ⓛ
VSS	VERTICAL SYNC SIGNAL
VTR [H]	VTR Ⓗ
VTR. 12V	VTR 12V
X IN	OSCILLATOR INPUT
X OUT	OSCILLATOR OUTPUT

5 INPUT/OUTPUT CHART

5.1. INPUT/OUTPUT CHART FOR IC6001

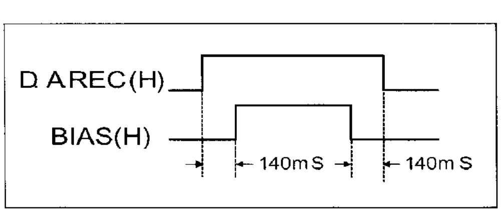
<table>
<tr><th>Pin No.</th><th>In/Out</th><th>Port Name</th><th>Function</th></tr>
<tr><td>1</td><td>O</td><td>AUDIO DEF(H)</td><td>This port is low while Decoder IC is reset.</td></tr>
<tr><td>2</td><td>O</td><td>LP(H)</td><td>This port is high during LP(X2) mode.</td></tr>
<tr><td>3</td><td>I</td><td>AFC(S)</td><td>Tuner S curve input.</td></tr>
<tr><td>4</td><td>O</td><td>SLP(H)</td><td>This port is high during SLP(X3) mode.</td></tr>
<tr><td>5</td><td>I</td><td>L6/U6/U4/U2/U2L</td><td>Cylinder unit selection (HI-FI/Normal)
<table>
<tr><th>Input voltage</th><th>Cylinder Type</th><th>HI-FI/NORMAL</th></tr>
<tr><td>More than 4.2V</td><td>LDD 6CH</td><td>HI-FI</td></tr>
<tr><td>3.0V - 4.2V</td><td>UDD 6CH</td><td>HI-FI</td></tr>
<tr><td>2.0V - 3.0V</td><td>UDD 2CH
(No LP mode)</td><td>NORMAL</td></tr>
<tr><td>0.8V - 2.0V</td><td>UDD 2CH
(With LP mode)</td><td>NORMAL</td></tr>
<tr><td>Less than 0.8V</td><td>UDD 4CH</td><td>NORMAL</td></tr>
</table></td></tr>
<tr><td>6</td><td>I</td><td>NORM/SER/T1/T2</td><td>Normal/Service/Test1/Test2 mode selection.
<table>
<tr><th>Input voltage</th><th>Mode</th></tr>
<tr><td>More than 4.0V</td><td>Normal</td></tr>
<tr><td>2.5V - 4.0V</td><td>Service</td></tr>
<tr><td>1.0V - 2.5V</td><td>Test2</td></tr>
<tr><td>Less than 1.0V</td><td>Test3</td></tr>
</table></td></tr>
<tr><td>7</td><td>I</td><td>S-PHOT</td><td>This port receives 2.4V or less when Supply photo sensor detects the tape end.</td></tr>
<tr><td>8</td><td>I</td><td>T-PHOT</td><td>This port receives 2.4V or less when Take-up photo sensor detects the tape beginning.</td></tr>
<tr><td>9</td><td>I</td><td>TRACKING ENVE</td><td>Playback envelope input for auto tracking adjustment and CVC.</td></tr>
<tr><td>10</td><td>O</td><td>Not used</td><td></td></tr>
<tr><td>11</td><td>O</td><td>CURRENT LIMIT</td><td>Capstan motor current limitter output.</td></tr>
<tr><td>12</td><td>O</td><td>F.ADJUST</td><td>Frequency responsibility adjustment voltage output.</td></tr>
<tr><td>13</td><td>O</td><td>ART.V/H/N</td><td>This port supplies artificial vertical sync signal to stabilize the picture in special playback mode.</td></tr>
<tr><td>14</td><td>I</td><td>REMOCON</td><td>Remote contoroll signal input and Digital Link input.</td></tr>
<tr><td>15</td><td>O</td><td>ROTARY.SW</td><td>Rotary switching signal output.</td></tr>
<tr><td>16</td><td>O</td><td>H.A.SW</td><td>Head amp switching signal output.</td></tr>
<tr><td>17</td><td>I</td><td>ENVE.SLECT</td><td>This port receives the playback envelope signal level to select the video head in special playback mode.</td></tr>
<tr><td>18</td><td>O</td><td>VIDEO.H.SW</td><td>Video head switching signal output.</td></tr>
<tr><td>19</td><td>O</td><td>AUDIO.H.SW</td><td>Audio head switching signal output.</td></tr>
<tr><td>20</td><td>O</td><td>CAL(H)</td><td>This port supplies high during audio IC automatic adjustment.</td></tr>
<tr><td>21</td><td>O</td><td>D.REC(H)</td><td>Video signal recording on/off control.</td></tr>
<tr><td>22</td><td>O</td><td>C.EMPHA(H)</td><td>This port supplies high during a certain time from starting the recording to control the HI-FI audio recording current.</td></tr>
<tr><td>23</td><td>O</td><td>FM.REC.MUTE(H)</td><td>HI-FI audio recording on/off control.</td></tr>
<tr><td>24</td><td>O</td><td>VIDEO.EE(L)</td><td>This port is low during EE mode.</td></tr>
<tr><td>25</td><td>O</td><td>PLAY REC(L)</td><td>Capstan voltage switching control output.
Except Play/Rec : High
Play/Rec : Low (Jog/Shuttle mode in Playback : High)</td></tr>
<tr><td>26</td><td>O</td><td>D.A.REC(H)</td><td rowspan="2">DC voltage control for recording mode.

</td></tr>
<tr><td>27</td><td>O</td><td>BIAS(L)</td></tr>
</table>

Fig. MP1

<table>
<tr><th>Pin No.</th><th>In/Out</th><th>Port Name</th><th>Function</th></tr>
<tr><td>28</td><td>O</td><td>FM.MUTE(H)</td><td>This port is high during special playback (CUE,REV,SLOW,STILL) mode, head cleaning and so on.</td></tr>
<tr><td>29</td><td>O</td><td>VSYNC(L)</td><td>This port is low when detecting the V-Sync signal.</td></tr>
<tr><td>30</td><td>O</td><td>FULL.ERASE(H)</td><td>Full erase on/off control.
ON : High
OFF : Low</td></tr>
<tr><td>31</td><td>I</td><td>POS.SW3</td><td rowspan="3">
<table>
<tr><th>P. SW 3</th><th>P. SW 2</th><th>P. SW 1</th><th>Position (Mode) Name</th></tr>
<tr><td>O</td><td>O</td><td>O</td><td>EJECT</td></tr>
<tr><td>O</td><td>O</td><td>I</td><td>CASSETTE DOWN</td></tr>
<tr><td>O</td><td>I</td><td>O</td><td>REV,REV SLOW</td></tr>
<tr><td>O</td><td>I</td><td>I</td><td>MID (LOADING/UNLOADING)</td></tr>
<tr><td rowspan="2">I</td><td rowspan="2">O</td><td rowspan="2">O</td><td>PLAY/REC,STILL/PAUSE,CUE</td></tr>
<tr><td>FWD SLOW,STOP3*1</td></tr>
<tr><td>I</td><td>O</td><td>I</td><td>STOP</td></tr>
<tr><td>I</td><td>I</td><td>O</td><td>FF/REW</td></tr>
<tr><td>I</td><td>I</td><td>I</td><td>INTERMEDIATE</td></tr>
</table>
(*1) The Pinch Roller is on the Capstan motor shaft.</td></tr>
<tr><td>32</td><td>I</td><td>POS.SW2</td></tr>
<tr><td>33</td><td>I</td><td>POS.SW1</td></tr>
<tr><td>34</td><td>I</td><td>RESET(L)</td><td>This port is low while IC6001 is reset.</td></tr>
<tr><td>35</td><td>I</td><td>32KHz.IN</td><td>Oscillator input.</td></tr>
<tr><td>36</td><td>O</td><td>32KHz.OUT</td><td>Oscillator output.</td></tr>
<tr><td>37</td><td>-</td><td>5V(D)</td><td>Digital 5V.</td></tr>
<tr><td>38</td><td>I</td><td>16MHz.IN</td><td>Oscillator input.</td></tr>
<tr><td>39</td><td>O</td><td>16MHz.OUT</td><td>Oscillator output.</td></tr>
<tr><td>40</td><td>-</td><td>GND(OSC)</td><td>Oscillator GND.</td></tr>
<tr><td>41</td><td>O</td><td>P.OFF(H)</td><td>This port is high during power off.
Power off,Timer REC stand-by etc. : High
VPS/PDC stand-by,ACS,Timer REC confirmation,Head cleaning : Low</td></tr>
<tr><td>42</td><td>O</td><td>FIP(L)</td><td>FIP on/off control.</td></tr>
<tr><td>43</td><td>I</td><td>16M.START(H)</td><td>Clock source selection at starting reset.</td></tr>
<tr><td>44</td><td>I</td><td>LC.OSD IN</td><td>OSD clock oscillator input.</td></tr>
<tr><td>45</td><td>O</td><td>LC.OSD OUT</td><td>OSD clock oscillator output.</td></tr>
<tr><td>46</td><td>-</td><td>GND</td><td>GND</td></tr>
<tr><td>47</td><td>I</td><td>4FC.LPF</td><td>LPF connection port</td></tr>
<tr><td>48</td><td>I</td><td>OSD FSC IN</td><td>OSD fsc input.</td></tr>
<tr><td>49</td><td>-</td><td>GND</td><td>OSD GND</td></tr>
<tr><td>50</td><td>I</td><td>CV IN</td><td>Composite video signal input</td></tr>
<tr><td>51</td><td>I</td><td>LECHA</td><td>White level of composite video signal input</td></tr>
<tr><td>52</td><td>O</td><td>CV OUT</td><td>Composite video signal output</td></tr>
<tr><td>53</td><td>I</td><td>5V(OSD)</td><td>OSD 5V</td></tr>
<tr><td>54</td><td>I</td><td>HLF</td><td>LPF connection port</td></tr>
<tr><td>55</td><td>I</td><td>SECAM.V.IN</td><td>Chrominance signal input for SECAM superimpose</td></tr>
<tr><td>56</td><td>I</td><td>Not used</td><td></td></tr>
<tr><td>57</td><td>-</td><td>GND</td><td>GND</td></tr>
<tr><td>58</td><td>I</td><td>C.SYNC</td><td>Composite sync signal input</td></tr>
<tr><td>59</td><td>O</td><td>PAL-I/BG/DK</td><td>System 4 (Refer to Fig.MP4)</td></tr>
<tr><td>60</td><td>O</td><td>SECAM(L)</td><td>System 2 (Refer to Fig.MP4)</td></tr>
<tr><td>61</td><td>O</td><td>SLEEP(L)</td><td>This port supplies low during super power save mode.</td></tr>
<tr><td>62</td><td>O</td><td>UNLOADING(H)</td><td>This port supplies high during the mechanism is unloaded.</td></tr>
<tr><td>63</td><td>O</td><td>LOADING(H)</td><td>This port supplies high during the mechanism is loaded.</td></tr>
</table>

Fig. MP2

Pin No.	In/Out	Port Name	Function
64	O	FLD/OSD CS	FIP driver and OSD microprocessor chip selection. FIP driver chip is selected : Low OSD microprocessor chip is selected : High
65	O	FLD/T2.DATA.OUT	FIP driver/Serial data output for factory.
66	I	FLD/T2.DATA.IN	FIP driver/Serial data input for factory.
67	O	FLD/T2.CLOCK	FIP driver/Serial data clock for factory.
68	O	T-BUS TLK	OSD microprocessor serial data output.
69	I	T-BUS LSN	OSD microprocessor serial data input.
70	O	T-BUS CLK	OSD microprocessor serial clock output.
71	O	IIC.CLOCK	Tuner and HI-FI audio IC serial clock output.
72	I/O	IIC.DATA	Tuner and HI-FI audio IC serial data input/output.
73	O	125Hz	Oscillator output for main clock adjustment.
74	O	CAP.R/F	Capstan rotation direction control. Reverse : High Forward : Low
75	O	HALF WAVE(H)	Capstan driver selection.
76	O	CAP.ET	Capstan torque control.
77	O	CYL.ET	Cylinder torque control.
78	I	POWER FAIL(L)	Power failure detection.
79	I	S.REEL.PULSE	Supply reel pulse input.
80	I	T.REEL.PULSE	Take-up reel pulse input.
81	I	STAB(L)	This port receives low when inserting the cassette tape with safety tab.
82	I	POWER KEY(H)	Power on/off key input.
83	I	SHORT DN	DC voltage (BIAS (H)) detection. When detecting High at BIAS (H) during BIAS (H) is set to except high, complsory power is turned off (Self test indication display F08). When detecting Low at BIAS (H) during BAIS (H) is set to high, complsory power is turned off (Self test indication display F07).
84	I	SECAM24(H)	Video head selection input. In SECAM model, this port is high when using 24u head chip for LP mode is mounted on the cylinder.
85	I	Not used	
86	O	CAP.FG OUT	Capstan FG output.
87	I	CAP.FG IN	Capstan FG input.
88	-	GND	GND.
89	I	Not used	
90	I	CYL.PFG	Cylinder PFG input.
91	O	OREF	Op amp output for 1/2 VDD reference.
92	I	IREF	Op amp input for 1/2 VDD reference.
93	I	Not used	
94	I	CTL.HEAD(-)	Control signal (-) input.
95	I	CTL.HEAD(+)	Control signal (+) input.
96	I	CTL.AMP.REF	Control amp reference input.
97	O	PB.CTL.OUT	Control amp output.
98	-	5V(A)	Analog 5V.
99	-	5V(AD)	5V.
100	O	EX.FF/REW(L)	This port supplies low during except FF and REW modes.

Fig. MP3

Pin No. Suffix	System 2 Pin 60	System 4 Pin 59
ALL	MESECAM (L) H : OTHER L : SECAM	I/L,DK,BG H:I/L Z:DK L:BG

Z : High impedance

Fig. MP4

5.2. TRUTH TABLE

5.2.1. EXCEPT B-S/B-K/BL-K MODEL

INPUT CONDITION							OUTPUT RESULT					
POWER	AV2 SELECT	TV/ VTR	EE/ VV	OSD ON(H)	INPUT CH	AV2 PB(H)	AV1 OUT	AV2 OUT	AV1 PB(H)	RGB SW	VCR IN	VCR OUT
P.OFF	---	---	---	---	---	L	AV2 IN	AV1 IN	L	OFF	TUN	TUN
						H	AV2 IN	AV1 IN	H	ON	TUN	TUN
VPS STAND BY	EXT	---	---	L	NORMAL TUN	L	AV2 IN	AV1 IN	L	OFF	TUN	TUN
						H	AV2 IN	AV1 IN	H	ON	TUN	TUN
					C+ TUNER	L	AV2 IN	AV1 IN	L	OFF	TUN	TUN
						H	AV2 IN	AV1 IN	H	ON	TUN	TUN
					AV1	L	AV2 IN	AV1 IN	L	OFF	AV1	AV1
						H	AV2 IN	AV1 IN	H	ON	AV1	AV1
					AV2	L	AV2 IN	AV1 IN	L	OFF	AV2	AV2
						H	AV2 IN	AV1 IN	H	ON	AV2	AV2
					AV3	L	AV2 IN	AV1 IN	L	OFF	AV3	AV3
						H	AV2 IN	AV1 IN	H	ON	AV3	AV3
					SAT.NOR TUN	L	AV2 IN	AV1 IN	L	OFF	SAT.TUN	SAT.TUN
						H	AV2 IN	AV1 IN	H	ON	SAT.TUN	SAT.TUN
					SAT.C+ TUN	L	AV2 IN	AV1 IN	L	OFF	SAT.TUN	SAT.TUN
						H	AV2 IN	AV1 IN	H	ON	SAT.TUN	SAT.TUN
				H	NORMAL TUN	L	VTR OUT	AV1 IN	H	OFF	TUN	TUN
						H	VTR OUT	AV1 IN	H	OFF	TUN	TUN
					C+ TUNER	L	VTR OUT	AV1 IN	H	OFF	TUN	TUN
						H	VTR OUT	AV1 IN	H	OFF	TUN	TUN
					AV1	L	VTR OUT	AV1 IN	H	OFF	AV1	AV1
						H	VTR OUT	AV1 IN	H	OFF	AV1	AV1
					AV2	L	VTR OUT	AV1 IN	H	ON	AV2	AV2
						H	VTR OUT	AV1 IN	H	ON	AV2	AV2
					AV3	L	VTR OUT	AV1 IN	H	OFF	AV3	AV3
						H	VTR OUT	AV1 IN	H	OFF	AV3	AV3
					SAT.NOR TUN	L	VTR OUT	AV1 IN	H	OFF	SAT.TUN	SAT.TUN
						H	VTR OUT	AV1 IN	H	OFF	SAT.TUN	SAT.TUN
					SAT.C+ TUN	L	VTR OUT	AV1 IN	H	OFF	SAT.TUN	SAT.TUN
						H	VTR OUT	AV1 IN	H	OFF	SAT.TUN	SAT.TUN
	DECODER	---	---	L	NORMAL TUN	L	AV2 IN	AV1 IN	L	OFF	TUN	TUN
						H	AV2 IN	AV1 IN	H	ON	TUN	TUN
					C+ TUNER	L	AV2 IN	AV1 IN	L	OFF	TUN	TUN
						H	AV2 IN	AV1 IN	H	ON	TUN	TUN
					AV1	L	AV2 IN	AV1 IN	L	OFF	AV1	AV1
						H	AV2 IN	AV1 IN	H	ON	AV2	AV2
					AV2	L	AV2 IN	AV1 IN	L	OFF	AV2	AV2
						H	AV2 IN	AV1 IN	H	ON	AV2	AV2
					AV3	L	AV2 IN	AV1 IN	L	OFF	AV3	AV3
						H	AV2 IN	AV1 IN	H	ON	AV3	AV3
					SAT.NOR TUN	L	AV2 IN	AV1 IN	L	OFF	SAT.TUN	SAT.TUN
						H	AV2 IN	AV1 IN	H	ON	SAT.TUN	SAT.TUN
					SAT.C+ TUN	L	AV2 IN	AV1 IN	L	OFF	SAT.TUN	SAT.TUN
						H	AV2 IN	AV1 IN	H	ON	SAT.TUN	SAT.TUN
				H	NORMAL TUN	L	VTR OUT	AV1 IN	H	OFF	TUN	TUN
						H	VTR OUT	AV1 IN	H	OFF	TUN	TUN
					C+ TUNER	L	VTR OUT	AV1 IN	H	OFF	TUN	TUN
						H	VTR OUT	AV1 IN	H	OFF	TUN	TUN
					AV1	L	VTR OUT	AV1 IN	H	OFF	AV1	AV1
						H	VTR OUT	AV1 IN	H	ON	AV2	AV2
					AV2	L	VTR OUT	AV1 IN	H	ON	AV2	AV2
						H	VTR OUT	AV1 IN	H	ON	AV2	AV2
					AV3	L	VTR OUT	AV1 IN	H	OFF	AV3	AV3
						H	VTR OUT	AV1 IN	H	OFF	AV3	AV3
					SAT.NOR TUN	L	VTR OUT	AV1 IN	H	OFF	SAT.TUN	SAT.TUN
						H	VTR OUT	AV1 IN	H	OFF	SAT.TUN	SAT.TUN
					SAT.C+ TUN	L	VTR OUT	AV1 IN	H	OFF	SAT.TUN	SAT.TUN
						H	VTR OUT	AV1 IN	H	OFF	SAT.TUN	SAT.TUN

NOTE: THIS TABLE IS ONLY FOR "EG-S/EG-K/EGYS/EGYK/EC-S/EC-K/ECMS/ECMK/ECYS/ECYK/EL-K/EP-K/EPYK" MODEL

INPUT CONDITION							OUTPUT RESULT					
POWER	AV2 SELECT	TV/ VTR	EE/ VV	OSD ON(H)	INPUT CH	AV2 PB(H)	AV1 OUT	AV2 OUT	AV1 PB(H)	RGB SW	VCR IN	VCR OUT
P.ON	EXT	TV	EE	L	NORMAL TUN	---	VTR OUT	VTR OUT	L	OFF	TUN	TUN
					C+ TUNER	---	VTR OUT	VTR OUT	L	OFF	TUN	TUN
					AV1	---	VTR OUT	VTR OUT	L	OFF	AV1	AV1
					AV2	---	VTR OUT	VTR OUT	L	ON	AV2	AV2
					AV3	---	VTR OUT	VTR OUT	L	OFF	AV3	AV3
					SAT.NOR TUN	---	VTR OUT	VTR OUT	L	OFF	SAT.TUN	SAT.TUN
					SAT.C+ TUN	---	VTR OUT	VTR OUT	L	OFF	SAT.TUN	SAT.TUN
				H	NORMAL TUN	---	VTR OUT	VTR OUT	H	OFF	TUN	TUN
					C+ TUNER	---	VTR OUT	VTR OUT	H	OFF	TUN	TUN
					AV1	---	VTR OUT	VTR OUT	H	OFF	AV1	AV1
					AV2	---	VTR OUT	VTR OUT	H	ON	AV2	AV2
					AV3	---	VTR OUT	VTR OUT	H	OFF	AV3	AV3
					SAT.NOR TUN	---	VTR OUT	VTR OUT	H	OFF	SAT.TUN	SAT.TUN
					SAT.C+ TUN	---	VTR OUT	VTR OUT	H	OFF	SAT.TUN	SAT.TUN
		VTR	EE	L	NORMAL TUN	---	VTR OUT	VTR OUT	H	OFF	TUN	TUN
					C+ TUNER	---	VTR OUT	VTR OUT	H	OFF	TUN	TUN
					AV1	---	VTR OUT	VTR OUT	H	OFF	AV1	AV1
					AV2	---	VTR OUT	VTR OUT	H	ON	AV2	AV2
					AV3	---	VTR OUT	VTR OUT	H	OFF	AV3	AV3
					SAT.NOR TUN	---	VTR OUT	VTR OUT	H	OFF	SAT.TUN	SAT.TUN
					SAT.C+ TUN	---	VTR OUT	VTR OUT	H	OFF	SAT.TUN	SAT.TUN
				H	NORMAL TUN	---	VTR OUT	VTR OUT	H	OFF	TUN	TUN
					C+ TUNER	---	VTR OUT	VTR OUT	H	OFF	TUN	TUN
					AV1	---	VTR OUT	VTR OUT	H	OFF	AV1	AV1
					AV2	---	VTR OUT	VTR OUT	H	ON	AV2	AV2
					AV3	---	VTR OUT	VTR OUT	H	OFF	AV3	AV3
					SAT.NOR TUN	---	VTR OUT	VTR OUT	H	OFF	SAT.TUN	SAT.TUN
					SAT.C+ TUN	---	VTR OUT	VTR OUT	H	OFF	SAT.TUN	SAT.TUN
			VV	---	NORMAL TUN	---	VTR OUT	VTR OUT	H	OFF	TUN	PB
					C+ TUNER	---	VTR OUT	VTR OUT	H	OFF	TUN	PB
					AV1	---	VTR OUT	VTR OUT	H	OFF	AV1	PB
					AV2	---	VTR OUT	VTR OUT	H	OFF	AV2	PB
					AV3	---	VTR OUT	VTR OUT	H	OFF	AV3	PB
					SAT.NOR TUN	---	VTR OUT	VTR OUT	H	OFF	SAT.TUN	PB
					SAT.C+ TUN	---	VTR OUT	VTR OUT	H	OFF	SAT.TUN	PB
	DECODER	TV	EE	L	NORMAL TUN	L	VTR OUT	AV1 IN	L	OFF	TUN	TUN
						H	AV2 IN	AV1 IN	H	ON	TUN	TUN
					C+ TUNER	L	VTR OUT	TUN IN	L	OFF	TUN	TUN
						H	VTR OUT	TUN IN	L	OFF	AV2	AV2
					AV1	L	VTR OUT	AV1 IN	L	OFF	AV1	AV1
						H	AV2 IN	AV1 IN	H	ON	AV2	AV2
					AV2	L	VTR OUT	AV1 IN	L	ON	AV2	AV2
						H	AV2 IN	AV1 IN	H	ON	AV2	AV2
					AV3	L	VTR OUT	AV1 IN	L	OFF	AV3	AV3
						H	AV2 IN	AV1 IN	H	ON	AV3	AV3
					SAT.NOR TUN	L	VTR OUT	AV1 IN	L	OFF	SAT.TUN	SAT.TUN
						H	AV2 IN	AV1 IN	H	ON	SAT.TUN	SAT.TUN
					SAT.C+ TUN	L	VTR OUT	SAT IN	L	OFF	SAT.TUN	SAT.TUN
						H	VTR OUT	SAT IN	L	OFF	AV2	AV2
				H	NORMAL TUN	L	VTR OUT	AV1 IN	H	OFF	TUN	TUN
						H	VTR OUT	AV1 IN	H	OFF	TUN	TUN
					C+ TUNER	L	VTR OUT	TUN IN	H	OFF	TUN	TUN
						H	VTR OUT	TUN IN	H	ON	AV2	AV2
					AV1	L	VTR OUT	AV1 IN	H	OFF	AV1	AV1
						H	VTR OUT	AV1 IN	H	ON	AV2	AV2
					AV2	L	VTR OUT	AV1 IN	H	ON	AV2	AV2
						H	VTR OUT	AV1 IN	H	ON	AV2	AV2

NOTE: THIS TABLE IS ONLY FOR "EG-S/EG-K/EGYS/EGYK/EC-S/EC-K/ECMS/ECMK/ECYS/ECYK/EL-K/EP-K/EPYK" MODEL

INPUT CONDITION							OUTPUT RESULT					
POWER	AV2 SELECT	TV/ VTR	EE/ VV	OSD ON(H)	INPUT CH	AV2 PB(H)	AV1 OUT	AV2 OUT	AV1 PB(H)	RGB SW	VCR IN	VCR OUT
P.ON	DECODER	TV	EE	H	AV3	L	VTR OUT	AV1 IN	H	OFF	AV3	AV3
						H	VTR OUT	AV1 IN	H	OFF	AV3	AV3
					SAT.NOR TUN	L	VTR OUT	AV1 IN	H	OFF	SAT.TUN	SAT.TUN
						H	VTR OUT	AV1 IN	H	OFF	SAT.TUN	SAT.TUN
					SAT.C+ TUN	L	VTR OUT	SAT IN	H	OFF	SAT.TUN	SAT.TUN
						H	VTR OUT	SAT IN	H	ON	AV2	AV2
		VTR	EE	L	NORMAL TUN	L	VTR OUT	AV1 IN	H	OFF	TUN	TUN
						H	VTR OUT	AV1 IN	H	OFF	TUN	TUN
					C+ TUNER	L	VTR OUT	TUN IN	H	OFF	TUN	TUN
						H	VTR OUT	TUN IN	H	ON	AV2	AV2
					AV1	L	VTR OUT	AV1 IN	H	OFF	AV1	AV1
						H	VTR OUT	AV1 IN	H	ON	AV2	AV2
					AV2	L	VTR OUT	AV1 IN	H	ON	AV2	AV2
						H	VTR OUT	AV1 IN	H	ON	AV2	AV2
					AV 3	L	VTR OUT	AV1 IN	H	OFF	AV3	AV3
						H	VTR OUT	AV1 IN	H	OFF	AV3	AV3
					SAT.NOR TUN	L	VTR OUT	AV1 IN	H	OFF	SAT.TUN	SAT.TUN
						H	VTR OUT	AV1 IN	H	OFF	SAT.TUN	SAT.TUN
					SAT.C+ TUN	L	VTR OUT	SAT IN	H	OFF	SAT.TUN	SAT.TUN
						H	VTR OUT	SAT IN	H	ON	AV2	AV2
				H	NORMAL TUN	L	VTR OUT	AV1 IN	H	OFF	TUN	TUN
						H	VTR OUT	AV1 IN	H	OFF	TUN	TUN
					C+ TUNER	L	VTR OUT	TUN IN	H	OFF	TUN	TUN
						H	VTR OUT	TUN IN	H	ON	AV2	AV2
					AV1	L	VTR OUT	AV1 IN	H	OFF	AV1	AV1
						H	VTR OUT	AV1 IN	H	ON	AV2	AV2
					AV2	L	VTR OUT	AV1 IN	H	ON	AV2	AV2
						H	VTR OUT	AV1 IN	H	ON	AV2	AV2
					AV3	L	VTR OUT	AV1 IN	H	OFF	AV3	AV3
						H	VTR OUT	AV1 IN	H	OFF	AV3	AV3
					SAT.NOR TUN	L	VTR OUT	AV1 IN	H	OFF	SAT.TUN	SAT.TUN
						H	VTR OUT	AV1 IN	H	OFF	SAT.TUN	SAT.TUN
					SAT.C+ TUN	L	VTR OUT	SAT IN	H	OFF	SAT.TUN	SAT.TUN
						H	VTR OUT	SAT IN	H	ON	AV2	AV2
			VV	---	NORMAL TUN	L	VTR OUT	AV1 IN	H	OFF	TUN	PB
						H	VTR OUT	AV1 IN	H	OFF	TUN	PB
					C+ TUNER	L	VTR OUT	TUN IN	H	OFF	TUN	PB
						H	VTR OUT	TUN IN	H	OFF	AV2	PB
					AV1	L	VTR OUT	AV1 IN	H	OFF	AV1	PB
						H	VTR OUT	AV1 IN	H	OFF	AV2	PB
					AV2	L	VTR OUT	AV1 IN	H	OFF	AV2	PB
						H	VTR OUT	AV1 IN	H	OFF	AV2	PB
					AV3	L	VTR OUT	AV1 IN	H	OFF	AV3	PB
						H	VTR OUT	AV1 IN	H	OFF	AV3	PB
					SAT.NOR TUN	L	VTR OUT	AV1 IN	H	OFF	SAT.TUN	PB
						H	VTR OUT	AV1 IN	H	OFF	SAT.TUN	PB
					SAT.C+ TUN	L	VTR OUT	SAT IN	H	OFF	SAT.TUN	PB
						H	VTR OUT	SAT IN	H	OFF	AV2	PB

NOTE: THIS TABLE IS ONLY FOR “EG-S/EG-K/EGYS/EGYK/EC-S/EC-K/ECMS/ECMK/ECYS/ECYK/EL-K/EP-K/EPYK” MODEL

5.2.2. B-S/B-K/BL-K MODEL

INPUT CONDITION						OUTPUT RESULT					
POWER	AV2 SELECT	EE/VV	OSD ON(H)	INPUT CH	AV PB(H)	AV1 OUT	AV2 OUT	AV1 PB(H)	RGB SW	VCR IN	VCR OUT
P.OFF	----	----	----	----	L	AV2 IN	AV1 IN	L	OFF	TUN	TUN
					H	AV2 IN	AV1 IN	H	ON	TUN	TUN
PDC STAND BY	EXT	----	L	TUNER	L	AV2 IN	AV1 IN	L	OFF	TUN	TUN
					H	AV2 IN	AV1 IN	H	ON	TUN	TUN
				AV1	L	AV2 IN	AV1 IN	L	OFF	AV1	AV1
					H	AV2 IN	AV1 IN	H	ON	AV1	AV1
				AV2	L	AV2 IN	AV1 IN	L	OFF	AV2	AV2
					H	AV2 IN	AV1 IN	H	ON	AV2	AV2
				AV3	L	AV2 IN	AV1 IN	L	OFF	AV3	AV3
					H	AV2 IN	AV1 IN	H	ON	AV3	AV3
				SAT.TUN	L	AV2 IN	AV1 IN	L	OFF	SAT.TUN	SAT.TUN
					H	AV2 IN	AV1 IN	H	ON	SAT.TUN	SAT.TUN
			H	TUNER	L	VTR OUT	AV1 IN	H	OFF	TUN	TUN
					H	VTR OUT	AV1 IN	H	OFF	TUN	TUN
				AV1	L	VTR OUT	AV1 IN	H	OFF	AV1	AV1
					H	VTR OUT	AV1 IN	H	OFF	AV1	AV1
				AV2	L	VTR OUT	AV1 IN	H	ON	AV2	AV2
					H	VTR OUT	AV1 IN	H	ON	AV2	AV2
				AV3	L	VTR OUT	AV1 IN	H	OFF	AV3	AV3
					H	VTR OUT	AV1 IN	H	OFF	AV3	AV3
				SAT.TUN	L	VTR OUT	AV1 IN	H	OFF	SAT.TUN	SAT.TUN
					H	VTR OUT	AV1 IN	H	OFF	SAT.TUN	SAT.TUN
	DECODER	----	L	TUNER	L	AV2 IN	AV1 IN	L	OFF	TUN	TUN
					H	AV2 IN	AV1 IN	H	ON	TUN	TUN
				AV1	L	AV2 IN	AV1 IN	L	OFF	AV1	AV1
					H	AV2 IN	AV1 IN	H	ON	AV2	AV2
				AV2	L	AV2 IN	AV1 IN	L	OFF	AV2	AV2
					H	AV2 IN	AV1 IN	H	ON	AV2	AV2
				AV3	L	AV2 IN	AV1 IN	L	OFF	AV3	AV3
					H	AV2 IN	AV1 IN	H	ON	AV3	AV3
				SAT.TUN	L	AV2 IN	AV1 IN	L	OFF	SAT.TUN	SAT.TUN
					H	AV2 IN	AV1 IN	H	ON	SAT.TUN	SAT.TUN
			H	TUNER	L	VTR OUT	AV1 IN	H	OFF	TUN	TUN
					H	VTR OUT	AV1 IN	H	OFF	TUN	TUN
				AV1	L	VTR OUT	AV1 IN	H	OFF	AV1	AV1
					H	VTR OUT	AV1 IN	H	ON	AV2	AV2
				AV2	L	VTR OUT	AV1 IN	H	ON	AV2	AV2
					H	VTR OUT	AV1 IN	H	ON	AV2	AV2
				AV3	L	VTR OUT	AV1 IN	H	OFF	AV3	AV3
					H	VTR OUT	AV1 IN	H	OFF	AV3	AV3
				SAT.TUN	L	VTR OUT	AV1 IN	H	OFF	SAT.TUN	SAT.TUN
					H	VTR OUT	AV1 IN	H	OFF	SAT.TUN	SAT.TUN

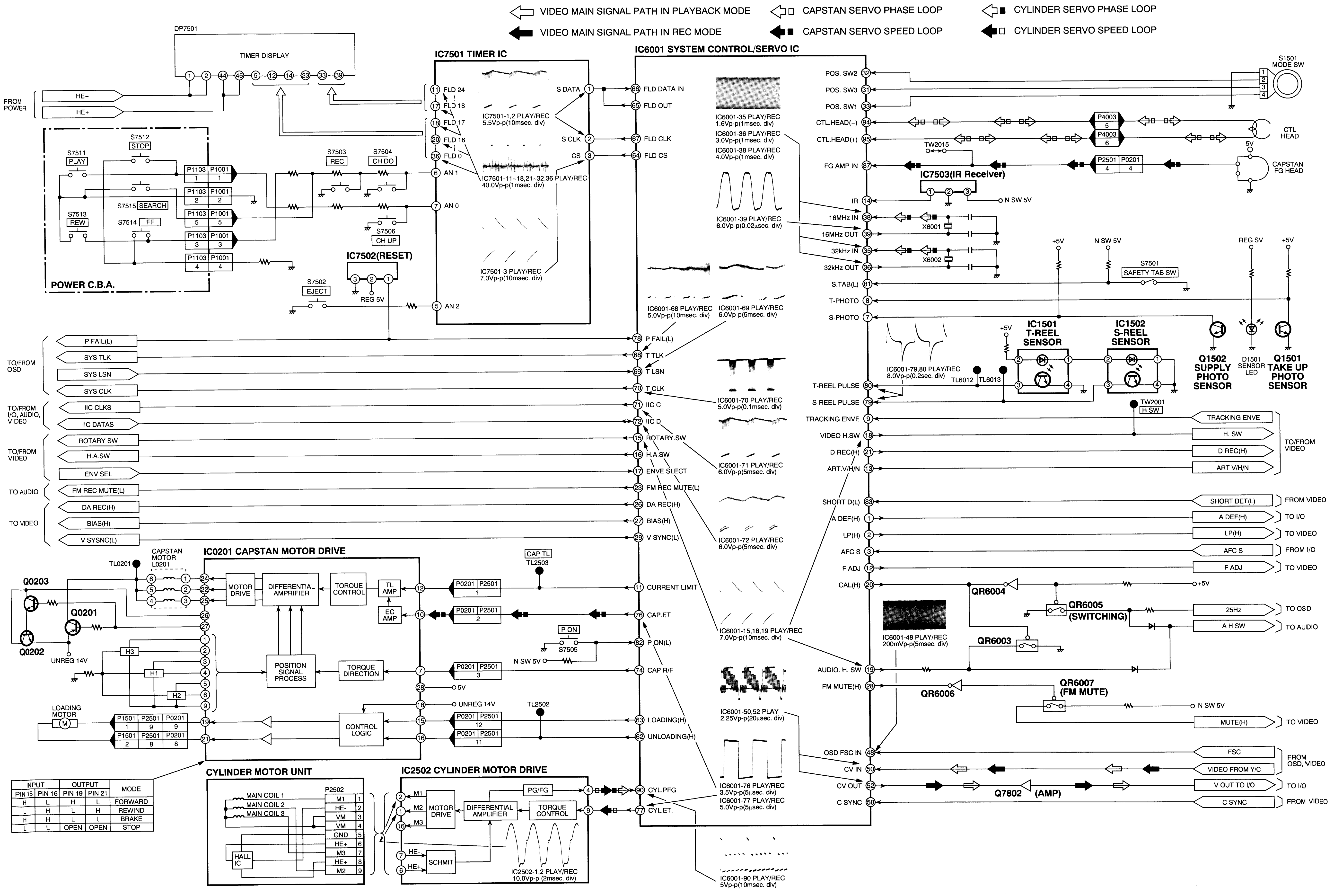
NOTE: THIS TABLE IS ONLY FOR "B-S/B-K/BL-K" MODEL

INPUT CONDITION						OUTPUT RESULT					
POWER	AV2 SELECT	EE/VV	OSD ON(H)	INPUT CH	AV PB(H)	AV1 OUT	AV2 OUT	AV1 PB(H)	RGB SW	VCR IN	VCR OUT
P.ON	EXT	EE	L	TUNER	----	VTR OUT	VTR OUT	L	OFF	TUN	TUN
				AV1	----	VTR OUT	VTR OUT	L	OFF	AV1	AV1
				AV2	----	VTR OUT	VTR OUT	L	ON	AV2	AV2
				AV3	----	VTR OUT	VTR OUT	L	OFF	AV3	AV3
				SAT.TUN	----	VTR OUT	VTR OUT	L	OFF	SAT.TUN	SAT.TUN
			H	TUNER	----	VTR OUT	VTR OUT	H	OFF	TUN	TUN
				AV1	----	VTR OUT	VTR OUT	H	OFF	AV1	AV1
				AV2	----	VTR OUT	VTR OUT	H	ON	AV2	AV2
				AV3	----	VTR OUT	VTR OUT	H	OFF	AV3	AV3
				SAT.TUN	----	VTR OUT	VTR OUT	H	OFF	SAT.TUN	SAT.TUN
		VV	----	TUNER	----	VTR OUT	VTR OUT	H	OFF	TUN	PB
				AV1	----	VTR OUT	VTR OUT	H	OFF	AV1	PB
				AV2	----	VTR OUT	VTR OUT	H	OFF	AV2	PB
				AV3	----	VTR OUT	VTR OUT	H	OFF	AV3	PB
				SAT.TUN	----	VTR OUT	VTR OUT	H	OFF	SAT.TUN	PB
	DECODER	EE	L	TUNER	L	VTR OUT	TUN IN	L	OFF	TUN	TUN
					H	VTR OUT	TUN IN	L	ON	AV2	AV2
				AV1	L	VTR OUT	AV1 IN	L	OFF	AV1	AV1
					H	VTR OUT	AV1 IN	L	ON	AV2	AV2
				AV2	L	VTR OUT	AV1 IN	L	ON	AV2	AV2
					H	VTR OUT	AV1 IN	L	ON	AV2	AV2
				AV3	L	VTR OUT	AV1 IN	L	OFF	AV3	AV3
					H	VTR OUT	AV1 IN	L	OFF	AV3	AV3
				SAT.TUN	L	VTR OUT	SAT IN	L	OFF	SAT.TUN	SAT.TUN
					H	VTR OUT	SAT IN	L	ON	AV2	AV2
			H	TUNER	L	VTR OUT	TUN IN	H	OFF	TUN	TUN
					H	VTR OUT	TUN IN	H	ON	AV2	AV2
				AV1	L	VTR OUT	AV1 IN	H	OFF	AV1	AV1
					H	VTR OUT	AV1 IN	H	ON	AV2	AV2
				AV2	L	VTR OUT	AV1 IN	H	ON	AV2	AV2
					H	VTR OUT	AV1 IN	H	ON	AV2	AV2
				AV3	L	VTR OUT	AV1 IN	H	OFF	AV3	AV3
					H	VTR OUT	AV1 IN	H	OFF	AV3	AV3
				SAT.TUN	L	VTR OUT	SAT IN	H	OFF	SAT.TUN	SAT.TUN
					H	VTR OUT	SAT IN	H	ON	AV2	AV2
		VV	----	TUNER	L	VTR OUT	TUN IN	H	OFF	TUN	PB
					H	VTR OUT	TUN IN	H	OFF	AV2	PB
				AV1	L	VTR OUT	AV1 IN	H	OFF	AV1	PB
					H	VTR OUT	AV1 IN	H	OFF	AV2	PB
				AV2	L	VTR OUT	AV1 IN	H	OFF	AV2	PB
					H	VTR OUT	AV1 IN	H	OFF	AV2	PB
				AV3	L	VTR OUT	AV1 IN	H	OFF	AV3	PB
					H	VTR OUT	AV1 IN	H	OFF	AV3	PB
				SAT.TUN	L	VTR OUT	SAT IN	H	OFF	SAT.TUN	PB
					H	VTR OUT	SAT IN	H	OFF	AV2	PB

NOTE: THIS TABLE IS ONLY FOR “B-S/B-K/BL-K” MODEL

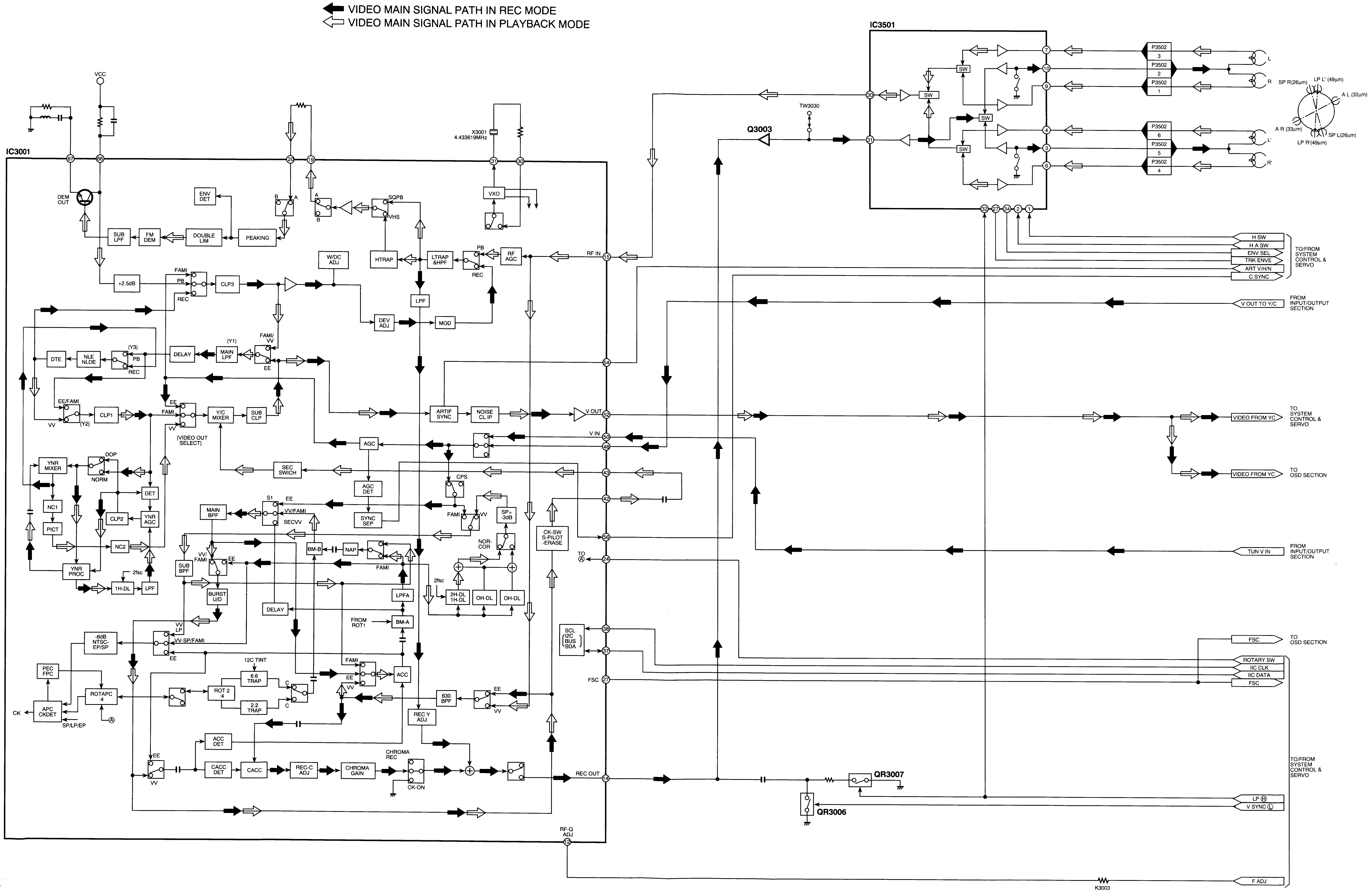
6 BLOCK DIAGRAMS

6.1. SYSTEM CONTROL & SERVO / TIMER SECTION BLOCK DIAGRAM

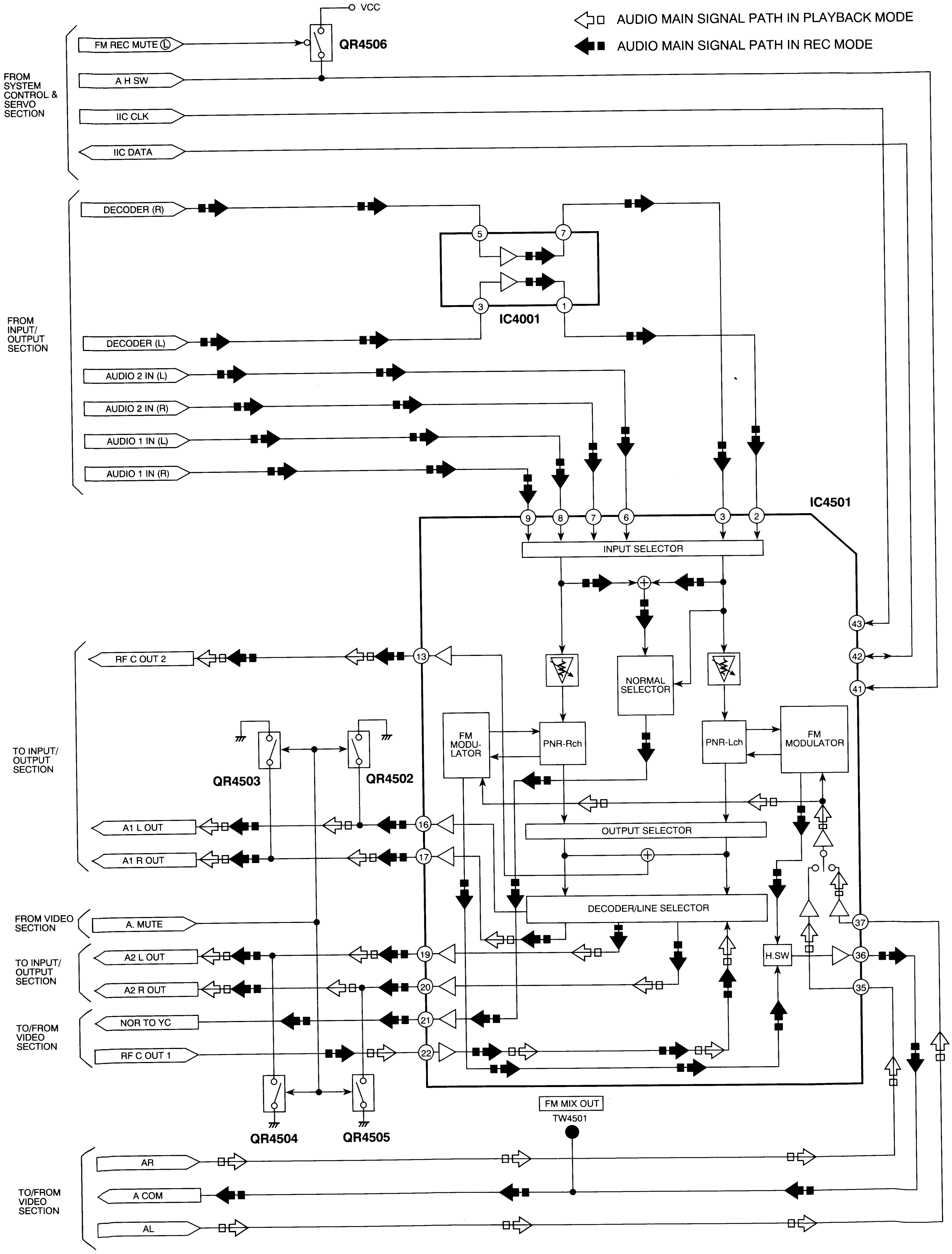

VIDEO MAIN SIGNAL PATH IN PLAYBACK MODE
VIDEO MAIN SIGNAL PATH IN REC MODE
CAPSTAN SERVO PHASE LOOP
CAPSTAN SERVO SPEED LOOP
CYLINDER SERVO PHASE LOOP
CYLINDER SERVO SPEED LOOP
DP7501
TIMER DISPLAY
FROM POWER
HE-
HE+
S7512 STOP
S7511 PLAY
S7515 SEARCH
S7513 REW
S7514 FF
P1103
P1001
POWER C.B.A.
S7503 REC
S7504 CH DO
S7506 CH UP
S7502 EJECT
IC7502(RESET)
REG 5V
IC7501 TIMER IC
FLD 24
FLD 18
FLD 17
FLD 16
FLD 0
AN 1
AN 0
AN 2
S DATA
S CLK
CS
IC7501-1,2 PLAY/REC 5.5Vp-p(10msec. div)
IC7501-11~18,21~32,36 PLAY/REC 40.0Vp-p(1msec. div)
IC7501-3 PLAY/REC 7.0Vp-p(10msec. div)
IC6001 SYSTEM CONTROL/SERVO IC
FLD DATA IN
FLD OUT
FLD CLK
FLD CS
IC6001-35 PLAY/REC 1.6Vp-p(1msec. div)
IC6001-36 PLAY/REC 3.0Vp-p(1msec. div)
IC6001-38 PLAY/REC 4.0Vp-p(1msec. div)
IC6001-39 PLAY/REC 6.0Vp-p(0.02µsec. div)
IC6001-68 PLAY/REC 5.0Vp-p(10msec. div)
IC6001-69 PLAY/REC 6.0Vp-p(5msec. div)
IC6001-70 PLAY/REC 5.0Vp-p(0.1msec. div)
IC6001-71 PLAY/REC 6.0Vp-p(5msec. div)
IC6001-72 PLAY/REC 6.0Vp-p(5msec. div)
IC6001-15,18,19 PLAY/REC 7.0Vp-p(10msec. div)
IC6001-50,52 PLAY 2.25Vp-p(20µsec. div)
IC6001-76 PLAY/REC 3.5Vp-p(5µsec. div)
IC6001-77 PLAY/REC 5.0Vp-p(5µsec. div)
IC6001-90 PLAY/REC 5Vp-p(10msec. div)
IC6001-79,80 PLAY/REC 8.0Vp-p(0.2sec. div)
IC6001-48 PLAY/REC 200mVp-p(5msec. div)
TO/FROM OSD
P FAIL(L)
SYS TLK
SYS LSN
SYS CLK
TO/FROM I/O, AUDIO, VIDEO
IIC CLKS
IIC DATAS
TO/FROM VIDEO
ROTARY SW
H.A.SW
ENV SEL
TO AUDIO
FM REC MUTE(L)
TO VIDEO
DA REC(H)
BIAS(H)
V SYSNC(L)
T TLK
T LSN
T CLK
IIC C
IIC D
ROTARY.SW
H.A.SW
ENVE SLECT
FM REC MUTE(L)
DA REC(H)
BIAS(H)
V SYNC(L)
CURRENT LIMIT
CAP.ET
P ON(L)
CAP R/F
LOADING(H)
UNLOADING(H)
CYL.PFG
CYL.ET.
CAPSTAN MOTOR L0201
TL0201
IC0201 CAPSTAN MOTOR DRIVE
Q0203
Q0201
Q0202
UNREG 14V
H1
H2
H3
MOTOR DRIVE
DIFFERENTIAL AMPRIFIER
TORQUE CONTROL
TL AMP
EC AMP
POSITION SIGNAL PROCESS
TORQUE DIRECTION
CONTROL LOGIC
LOADING MOTOR
P1501
P2501
P0201
CAP TL
TL2503
P ON
S7505
N SW 5V
5V
UNREG 14V
TL2502
CYLINDER MOTOR UNIT
MAIN COIL 1
MAIN COIL 2
MAIN COIL 3
HALL IC
P2502
M1
HE-
VM
GND
HE+
M3
M2
IC2502 CYLINDER MOTOR DRIVE
MOTOR DRIVE
DIFFERENTIAL AMPLIFIER
TORQUE CONTROL
PG/FG
SCHMIT
IC2502-1,2 PLAY/REC 10.0Vp-p (2msec. div)
POS. SW2
POS. SW3
POS. SW1
CTL.HEAD(-)
CTL.HEAD(+)
FG AMP IN
IR
16MHz IN
16MHz OUT
32kHz IN
32kHz OUT
S.TAB(L)
T-PHOTO
S-PHOTO
T-REEL PULSE
S-REEL PULSE
TRACKING ENVE
VIDEO H.SW
D REC(H)
ART.V/H/N
SHORT D(L)
A DEF(H)
LP(H)
AFC S
F ADJ
CAL(H)
AUDIO. H. SW
FM MUTE(H)
OSD FSC IN
CV IN
CV OUT
C SYNC
S1501 MODE SW
P4003
CTL HEAD
TW2015
P2501
P0201
CAPSTAN FG HEAD
IC7503(IR Receiver)
N SW 5V
X6001
X6002
+5V
S7501 SAFETY TAB SW
REG SV
IC1501 T-REEL SENSOR
IC1502 S-REEL SENSOR
Q1502 SUPPLY PHOTO SENSOR
D1501 SENSOR LED
Q1501 TAKE UP PHOTO SENSOR
TL6012
TL6013
TW2001 H SW
TRACKING ENVE
H. SW
D REC(H)
ART V/H/N
TO/FROM VIDEO
SHORT DET(L)
FROM VIDEO
A DEF(H)
TO I/O
LP(H)
TO VIDEO
AFC S
FROM I/O
F ADJ
TO VIDEO
QR6004
QR6005 (SWITCHING)
25Hz
TO OSD
A H SW
TO AUDIO
QR6003
QR6006
QR6007 (FM MUTE)
MUTE(H)
TO VIDEO
FSC
VIDEO FROM Y/C
FROM OSD, VIDEO
Q7802 (AMP)
V OUT TO I/O
TO I/O
C SYNC
FROM VIDEO

INPUT		OUTPUT		MODE
PIN 15	PIN 16	PIN 19	PIN 21	
H	L	H	L	FORWARD
L	H	L	H	REWIND
H	H	L	L	BRAKE
L	L	OPEN	OPEN	STOP

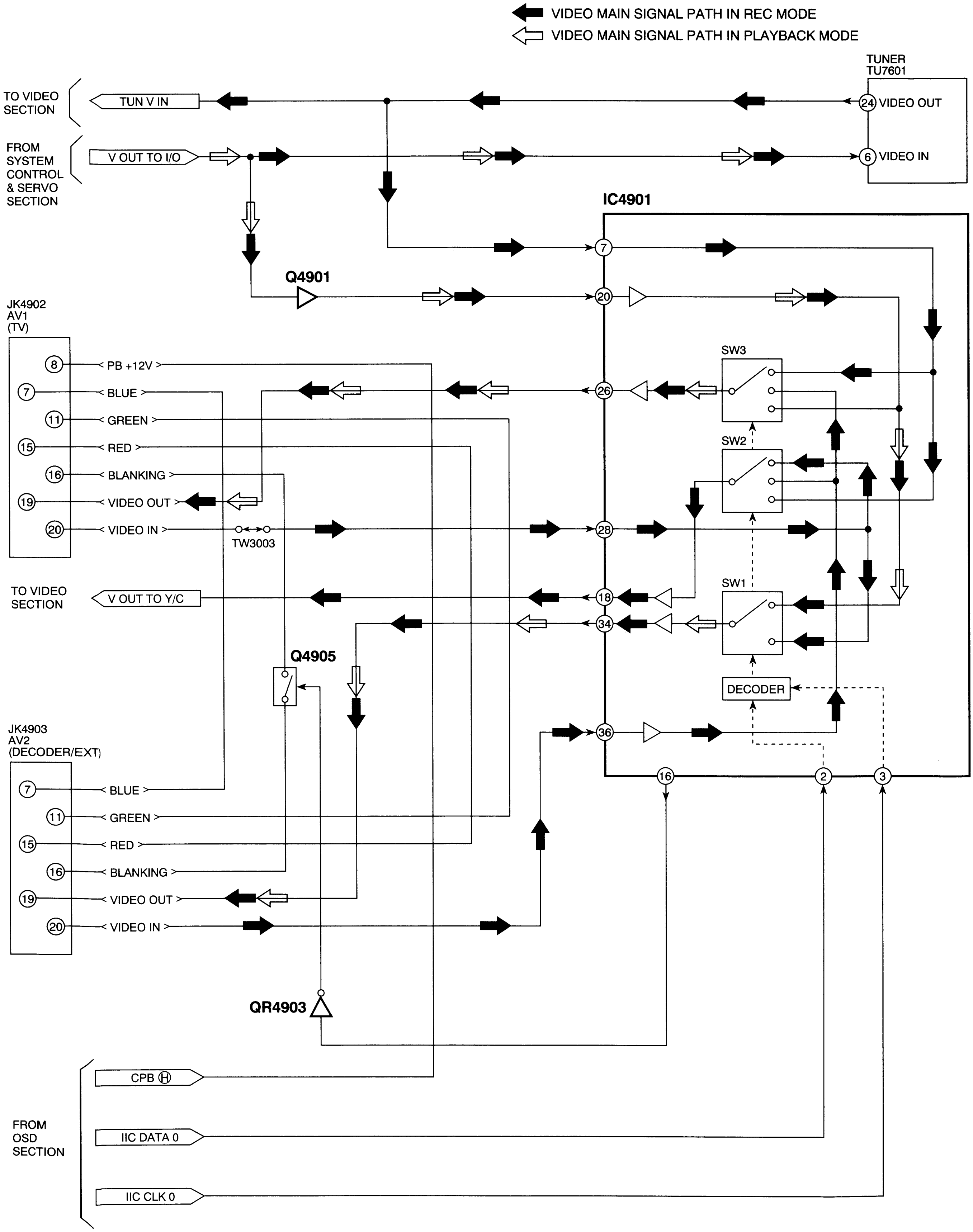
6.2. VIDEO SECTION BLOCK DIAGRAM


VIDEO MAIN SIGNAL PATH IN REC MODE
VIDEO MAIN SIGNAL PATH IN PLAYBACK MODE
IC3001
IC3501
VCC
DEM OUT
SUB LPF
FM DEM
DOUBLE LIM
PEAKING
ENV DET
SQPB
VHS
X3001 4.433619MHz
VXO
TW3030
Q3003
HTRAP
LTRAP &HPF
RF AGC
RF IN
W/DC ADJ
+2.5dB
FAMI
PB
REC
CLP3
LPF
DEV ADJ
MOD
DTE
NLE NLDE
(Y3)
DELAY
MAIN LPF
(Y1)
FAMI/ VV
EE
EE/FAMI
CLP1
(Y2)
VV
Y/C MIXER
SUB CLP
(VIDEO OUT SELECT)
ARTIF SYNC
NOISE CL IP
V OUT
V IN
AGC
SEC SWICH
AGC DET
SYNC SEP
CPS
SP= -3dB
NOR-COR
YNR MIXER
DOP
NORM
DET
NC1
PICT
CLP2
YNR AGC
NC2
YNR PROC
1H-DL
2fsc
MAIN BPF
S1
VV/FAMI
SECVV
SUB BPF
BURST U/D
BM-B
NAP
LPFA
DELAY
FROM ROT1
BM-A
2H-DL 1H-DL
OH-DL
CK-SW S-PILOT -ERASE
TO Ⓐ
SCL I2C BUS SDA
FSC
-6dB NTSC-EP/SP
VV LP
VV-SP/FAMI
PEC FPC
ROTAPC :4
APC CKDET
CK
SP/LP/EP
12C TINT
6.6 TRAP
ROT 2 :4
2.2 TRAP
ACC
630 BPF
REC Y ADJ
ACC DET
CACC DET
CACC
REC-C ADJ
CHROMA GAIN
CHROMA REC
CK-ON
REC OUT
RF-Q ADJ
SW
P3502
L
R
L'
R'
SP R(26μm)
LP L' (49μm)
A L (33μm)
A R (33μm)
SP L(26μm)
LP R'(49μm)
H SW
H A SW
ENV SEL
TRK ENVE
ART V/H/N
C SYNC
TO/FROM SYSTEM CONTROL & SERVO
V OUT TO Y/C
FROM INPUT/OUTPUT SECTION
VIDEO FROM YC
TO SYSTEM CONTROL & SERVO
TO OSD SECTION
TUN V IN
ROTARY SW
IIC CLK
IIC DATA
QR3007
QR3006
LP Ⓗ
V SYNC Ⓛ
K3003
F ADJ

6.3. Hi-Fi AUDIO SECTION BLOCK DIAGRAM


VCC
QR4506
AUDIO MAIN SIGNAL PATH IN PLAYBACK MODE
AUDIO MAIN SIGNAL PATH IN REC MODE
FROM SYSTEM CONTROL & SERVO SECTION
FM REC MUTE Ⓛ
A H SW
IIC CLK
IIC DATA
FROM INPUT/ OUTPUT SECTION
DECODER (R)
DECODER (L)
AUDIO 2 IN (L)
AUDIO 2 IN (R)
AUDIO 1 IN (L)
AUDIO 1 IN (R)
IC4001
IC4501
INPUT SELECTOR
NORMAL SELECTOR
FM MODU-LATOR
PNR-Rch
PNR-Lch
FM MODULATOR
OUTPUT SELECTOR
DECODER/LINE SELECTOR
H.SW
TO INPUT/ OUTPUT SECTION
RF C OUT 2
A1 L OUT
A1 R OUT
QR4503
QR4502
FROM VIDEO SECTION
A. MUTE
TO INPUT/ OUTPUT SECTION
A2 L OUT
A2 R OUT
TO/FROM VIDEO SECTION
NOR TO YC
RF C OUT 1
QR4504
QR4505
FM MIX OUT
TW4501
TO/FROM VIDEO SECTION
AR
A COM
AL

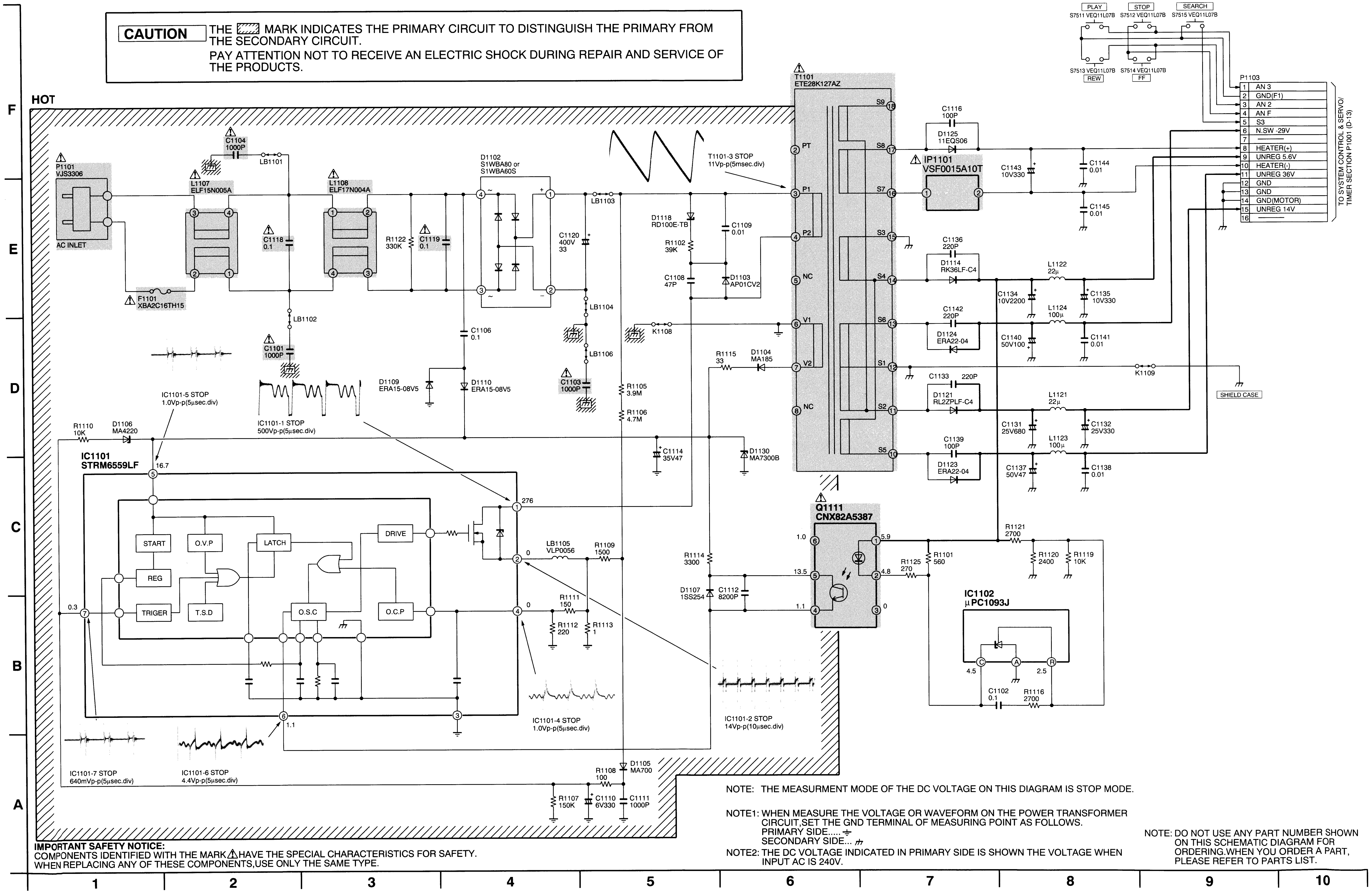
6.4. INPUT/OUTPUT SECTION BLOCK DIAGRAM


VIDEO MAIN SIGNAL PATH IN REC MODE
VIDEO MAIN SIGNAL PATH IN PLAYBACK MODE
TUNER
TU7601
24 VIDEO OUT
6 VIDEO IN
TO VIDEO SECTION
TUN V IN
FROM SYSTEM CONTROL & SERVO SECTION
V OUT TO I/O
IC4901
7
20
26
28
18
34
36
16
2
3
Q4901
SW3
SW2
SW1
DECODER
JK4902
AV1
(TV)
8 PB +12V
7 BLUE
11 GREEN
15 RED
16 BLANKING
19 VIDEO OUT
20 VIDEO IN
TW3003
TO VIDEO SECTION
V OUT TO Y/C
Q4905
JK4903
AV2
(DECODER/EXT)
7 BLUE
11 GREEN
15 RED
16 BLANKING
19 VIDEO OUT
20 VIDEO IN
QR4903
FROM OSD SECTION
CPB Ⓗ
IIC DATA 0
IIC CLK 0

7 SCHEMATIC DIAGRAMS

7.1. POWER SCHEMATIC DIAGRAM

CAUTION THE ▨ MARK INDICATES THE PRIMARY CIRCUIT TO DISTINGUISH THE PRIMARY FROM THE SECONDARY CIRCUIT.
PAY ATTENTION NOT TO RECEIVE AN ELECTRIC SHOCK DURING REPAIR AND SERVICE OF THE PRODUCTS.


HOT
F
E
D
C
B
A
1
2
3
4
5
6
7
8
9
10
P1101 VJS3306
AC INLET
F1101 XBA2C16TH15
C1104 1000P
LB1101
L1107 ELF15N005A
L1108 ELF17N004A
C1118 0.1
LB1102
C1101 1000P
R1122 330K
C1119 0.1
D1102 S1WBA80 or S1WBA60S
C1106 0.1
D1109 ERA15-08V5
D1110 ERA15-08V5
C1120 400V 33
LB1103
LB1104
LB1106
C1103 1000P
D1118 RD100E-TB
R1102 39K
C1108 47P
C1109 0.01
D1103 AP01CV2
K1108
R1105 3.9M
R1106 4.7M
R1115 33
D1104 MA185
C1114 35V47
D1130 MA7300B
T1101-3 STOP 11Vp-p(5msec.div)
IC1101-5 STOP 1.0Vp-p(5μsec.div)
IC1101-1 STOP 500Vp-p(5μsec.div)
R1110 10K
D1106 MA4220
IC1101 STRM6559LF
16.7
276
START
O.V.P
LATCH
DRIVE
REG
TRIGER
T.S.D
O.S.C
O.C.P
0.3
0
1.1
LB1105 VLP0056
R1109 1500
R1111 150
R1112 220
R1113 1
IC1101-4 STOP 1.0Vp-p(5μsec.div)
IC1101-2 STOP 14Vp-p(10μsec.div)
IC1101-7 STOP 640mVp-p(5μsec.div)
IC1101-6 STOP 4.4Vp-p(5μsec.div)
R1108 100
D1105 MA700
R1107 150K
C1110 6V330
C1111 1000P
T1101 ETE28K127AZ
PT
P1
P2
NC
V1
V2
S9
S8
S7
S3
S4
S6
S1
S2
S5
C1116 100P
D1125 11EQS06
IP1101 VSF0015A10T
C1143 10V330
C1144 0.01
C1145 0.01
C1136 220P
D1114 RK36LF-C4
L1122 22μ
C1134 10V2200
C1135 10V330
C1142 220P
D1124 ERA22-04
L1124 100μ
C1140 50V100
C1141 0.01
K1109
C1133 220P
D1121 RL2ZPLF-C4
L1121 22μ
C1131 25V680
C1132 25V330
C1139 100P
D1123 ERA22-04
L1123 100μ
C1137 50V47
C1138 0.01
SHIELD CASE
Q1111 CNX82A5387
1.0
13.5
1.1
5.9
4.8
0
R1114 3300
D1107 1SS254
C1112 8200P
R1125 270
R1101 560
R1121 2700
R1120 2400
R1119 10K
IC1102 μPC1093J
4.5
2.5
C1102 0.1
R1116 2700
PLAY S7511 VEQ11L07B
STOP S7512 VEQ11L07B
SEARCH S7515 VEQ11L07B
S7513 VEQ11L07B REW
S7514 VEQ11L07B FF
P1103
1 AN 3
2 GND(F1)
3 AN 2
4 AN F
5 S3
6 N.SW -29V
7 ——
8 HEATER(+)
9 UNREG 5.6V
10 HEATER(-)
11 UNREG 36V
12 GND
13 GND
14 GND(MOTOR)
15 UNREG 14V
16 ——
TO SYSTEM CONTROL & SERVO/ TIMER SECTION P1001 (D-13)

IMPORTANT SAFETY NOTICE:
COMPONENTS IDENTIFIED WITH THE MARK ⚠ HAVE THE SPECIAL CHARACTERISTICS FOR SAFETY.
WHEN REPLACING ANY OF THESE COMPONENTS,USE ONLY THE SAME TYPE.

NOTE: THE MEASURMENT MODE OF THE DC VOLTAGE ON THIS DIAGRAM IS STOP MODE.

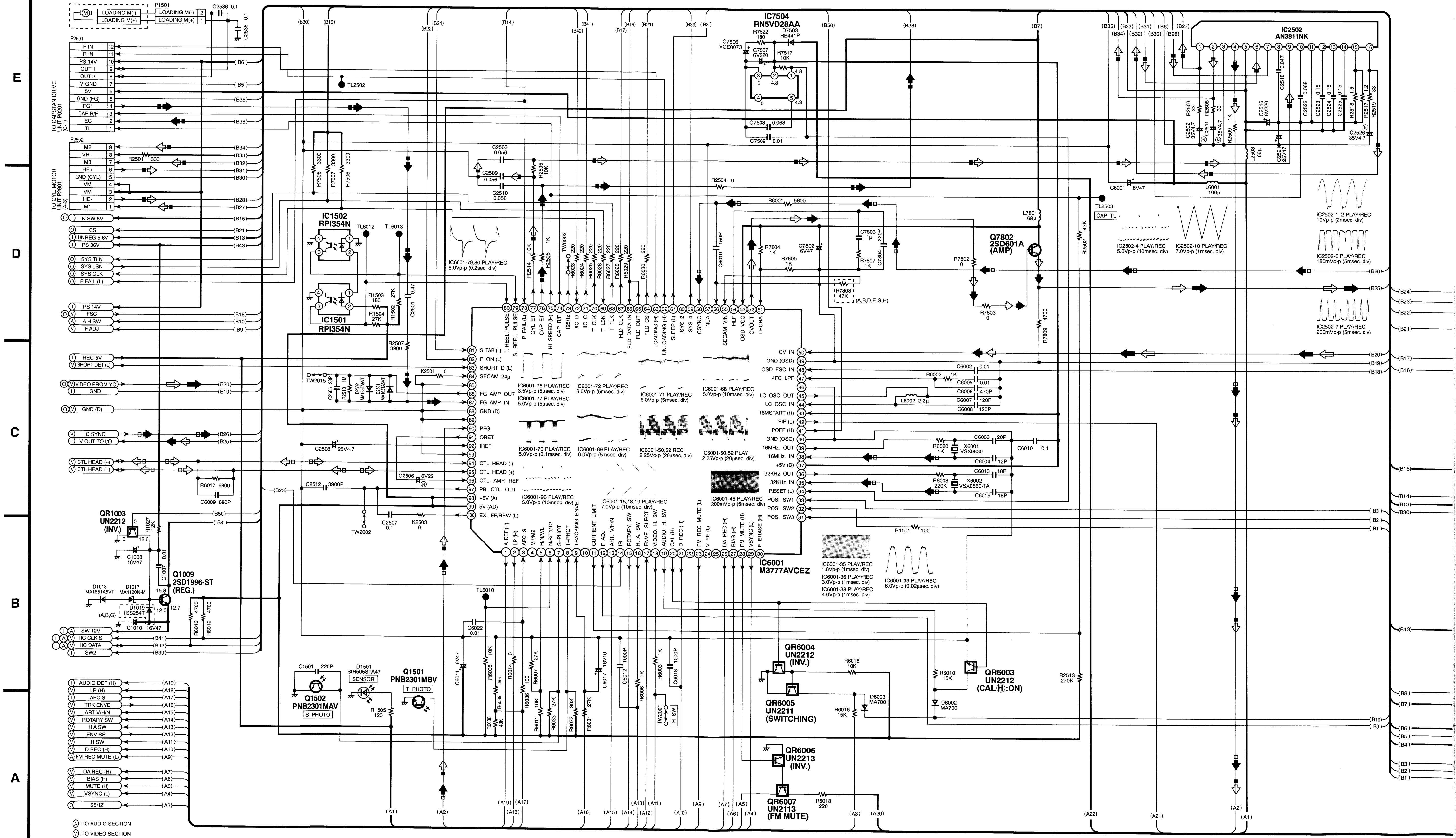
NOTE1: WHEN MEASURE THE VOLTAGE OR WAVEFORM ON THE POWER TRANSFORMER CIRCUIT,SET THE GND TERMINAL OF MEASURING POINT AS FOLLOWS.
PRIMARY SIDE..... ⏚
SECONDARY SIDE... ⏚

NOTE2: THE DC VOLTAGE INDICATED IN PRIMARY SIDE IS SHOWN THE VOLTAGE WHEN INPUT AC IS 240V.

NOTE: DO NOT USE ANY PART NUMBER SHOWN ON THIS SCHEMATIC DIAGRAM FOR ORDERING.WHEN YOU ORDER A PART, PLEASE REFER TO PARTS LIST.

7.2. SYSTEM CONTROL & SERVO / TIMER SECTION IN MAIN SCHEMATIC DIAGRAM

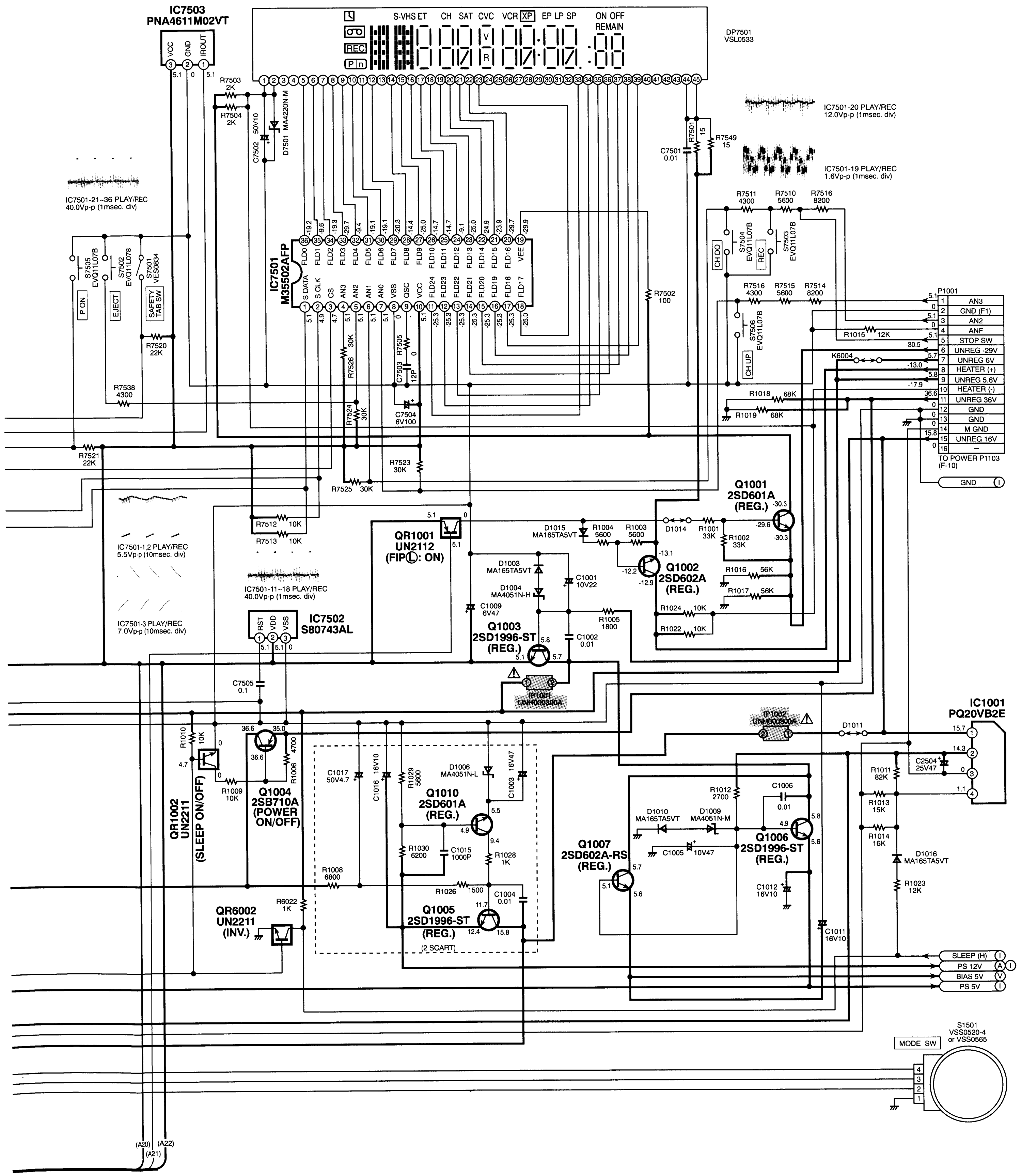
⇦ VIDEO MAIN SIGNAL PATH IN PLAYBACK MODE ⬅ VIDEO MAIN SIGNAL PATH IN REC MODE ⇦□ CAPSTAN SERVO PHASE LOOP ⬅■ CAPSTAN SERVO SPEED LOOP ⬅□ CYLINDER SERVO PHASE LOOP ⇦■ CYLINDER SERVO SPEED LOOP


E
D
C
B
A
1
2
3
4
5
6
7
8
9
P1501
LOADING M(-)
LOADING M(+)
P2501
F IN
R IN
PS 14V
OUT 1
OUT 2
M GND
5V
GND (FG)
FG1
CAP R/F
EC
TL
TO CAPSTAN DRIVE UNIT P0201 (C-1)
P2502
M2
VH+
M3
HE+
GND (CYL)
VM
VM
HE-
M1
TO CYL MOTOR UNIT P2901 (A-3)
N SW 5V
CS
UNREG 5.6V
PS 36V
SYS TLK
SYS LSN
SYS CLK
P FAIL (L)
PS 14V
FSC
A H SW
F ADJ
REG 5V
SHORT DET (L)
VIDEO FROM YC
GND
GND (D)
C SYNC
V OUT TO I/O
CTL HEAD (-)
CTL HEAD (+)
QR1003 UN2212 (INV.)
Q1009 2SD1996-ST (REG.)
D1018 MA165TA5VT
D1017 MA4120N-M
D1019 1SS254T
SW 12V
IIC CLK S
IIC DATA
SW2
AUDIO DEF (H)
LP (H)
AFC S
TRK ENVE
ART V/H/N
ROTARY SW
H A SW
ENV SEL
H SW
D REC (H)
FM REC MUTE (L)
DA REC (H)
BIAS (H)
MUTE (H)
VSYNC (L)
25HZ
IC1502 RPI354N
IC1501 RPI354N
TL2502
TL6012
TL6013
TL6010
TW2015
TW2002
Q1502 PNB2301MAV
S PHOTO
Q1501 PNB2301MBV
T PHOTO
D1501 SIR505STA47
SENSOR
IC7504 RN5VD28AA
D7503 RB441P
IC6001 M3777AVCEZ
IC2502 AN3811NK
Q7802 2SD601A (AMP)
QR6004 UN2212 (INV.)
QR6005 UN2211 (SWITCHING)
QR6006 UN2213 (INV.)
QR6007 UN2113 (FM MUTE)
QR6003 UN2212 (CAL(H):ON)
X6001 VSX0830
X6002 VSX0660-TA
TL2503
CAP TL
S TAB (L)
P ON (L)
SHORT D (L)
SECAM 24μ
FG AMP OUT
FG AMP IN
GND (D)
PFG
ORET
IREF
CTL HEAD (-)
CTL HEAD (+)
CTL AMP. REF
PB. CTL. OUT
+5V (A)
5V (AD)
EX. FF/REW (L)
CV IN
GND (OSD)
OSD FSC IN
4FC LPF
LC OSC OUT
LC OSC IN
16MSTART (H)
FIP (L)
POFF (H)
GND (OSC)
16MHz. OUT
16MHz. IN
+5V (D)
32KHz OUT
32KHz IN
RESET (L)
POS. SW1
POS. SW2
POS. SW3
IC6001-79,80 PLAY/REC 8.0Vp-p (0.2sec. div)
IC6001-76 PLAY/REC 3.5Vp-p (5μsec. div)
IC6001-77 PLAY/REC 5.0Vp-p (5μsec. div)
IC6001-72 PLAY/REC 6.0Vp-p (5msec. div)
IC6001-71 PLAY/REC 6.0Vp-p (5msec. div)
IC6001-68 PLAY/REC 5.0Vp-p (10msec. div)
IC6001-70 PLAY/REC 5.0Vp-p (0.1msec. div)
IC6001-69 PLAY/REC 6.0Vp-p (5msec. div)
IC6001-50,52 REC 2.25Vp-p (20μsec. div)
IC6001-50,52 PLAY 2.25Vp-p (20μsec. div)
IC6001-90 PLAY/REC 5.0Vp-p (10msec. div)
IC6001-15,18,19 PLAY/REC 7.0Vp-p (10msec. div)
IC6001-48 PLAY/REC 200mVp-p (5msec. div)
IC6001-35 PLAY/REC 1.6Vp-p (1msec. div)
IC6001-36 PLAY/REC 3.0Vp-p (1msec. div)
IC6001-38 PLAY/REC 4.0Vp-p (1msec. div)
IC6001-39 PLAY/REC 6.0Vp-p (0.02μsec. div)
IC2502-1, 2 PLAY/REC 10Vp-p (2msec. div)
IC2502-4 PLAY/REC 5.0Vp-p (10msec. div)
IC2502-10 PLAY/REC 7.0Vp-p (1msec. div)
IC2502-6 PLAY/REC 180mVp-p (5msec. div)
IC2502-7 PLAY/REC 200mVp-p (5msec. div)

Ⓐ :TO AUDIO SECTION
Ⓥ :TO VIDEO SECTION
Ⓘ :TO INPUT/OUTPUT & TUNER SECTION
Ⓞ :TO OSD SECTION

IMPORTANT SAFETY NOTICE: COMPONENTS IDENTIFIED WITH THE MARK ⚠ HAVE THE SPECIAL CHARACTERISTICS FOR SAFETY. WHEN REPLACING ANY OF THESE COMPONENTS, USE ONLY THE SAME TYPE.

NOTE: DO NOT USE ANY PARTS NUMBER SHOWN ON THIS SCHEMATIC DIAGRAM FOR ORDERING. WHEN YOU ORDER A PART, PLEASE REFER TO PARTS LIST.


IC7503
PNA4611M02VT
VCC
GND
IROUT
DP7501
VSL0533
S-VHS ET CH SAT CVC VCR XP EP LP SP
ON OFF
REMAIN
IC7501-20 PLAY/REC
12.0Vp-p (1msec. div)
IC7501-19 PLAY/REC
1.6Vp-p (1msec. div)
IC7501-21~36 PLAY/REC
40.0Vp-p (1msec. div)
IC7501
M35502AFP
S7505 EVQ11L07B
S7502 EVQ11L07B
S7501 VE5634
P ON
EJECT
SAFETY TAB SW
S7504 EVQ11L07B
S7503 EVQ11L07B
S7506 EVQ11L07B
CH DO
REC
CH UP
P1001
AN3
GND (F1)
AN2
ANF
STOP SW
UNREG -29V
UNREG 6V
HEATER (+)
UNREG 5.6V
HEATER (-)
UNREG 36V
GND
GND
M GND
UNREG 16V
TO POWER P1103 (F-10)
GND
Q1001
2SD601A
(REG.)
QR1001
UN2112
(FIP: ON)
Q1002
2SD602A
(REG.)
Q1003
2SD1996-ST
(REG.)
IC7501-1,2 PLAY/REC
5.5Vp-p (10msec. div)
IC7501-11~18 PLAY/REC
40.0Vp-p (1msec. div)
IC7501-3 PLAY/REC
7.0Vp-p (10msec. div)
IC7502
S80743AL
IP1001
UNH000300A
IP1002
UNH000300A
IC1001
PQ20VB2E
QR1002
UN2211
(SLEEP ON/OFF)
Q1004
2SB710A
(POWER ON/OFF)
Q1010
2SD601A
(REG.)
Q1007
2SD602A-RS
(REG.)
Q1006
2SD1996-ST
(REG.)
Q1005
2SD1996-ST
(REG.)
(2 SCART)
QR6002
UN2211
(INV.)
SLEEP (H)
PS 12V
BIAS 5V
PS 5V
MODE SW
S1501
VSS0520-4
or VSS0565
(A20)
(A21)
(A22)
10
11
12
13

NOTE: THE MEASUREMENT MODE OF THE DC VOLTAGE ON THIS DIAGRAM IS STOP MODE.

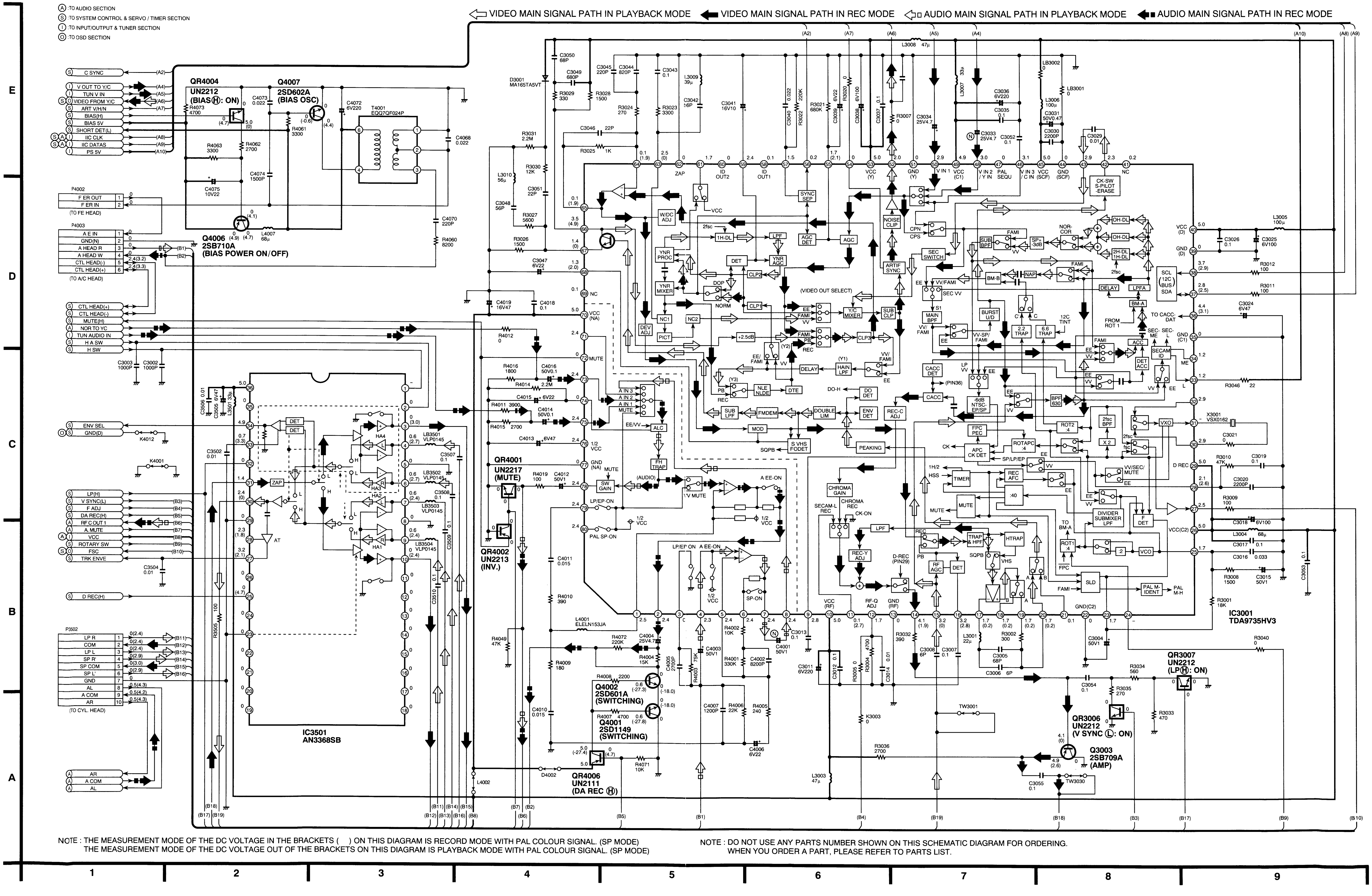
SYSTEM CONTROL & SERVO ICs DC VOLTAGE CHART (SP MODE)

REF.NO.	IC2502																			
PIN.NO.	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16				
STOP	14.3	14.6	14.3	1.1	4.9	1.0	1.1	0.4	2.3	1.3	0	3.7	3.7	3.7	0	13.9				
PLAY	13.9	13.9	14.3	1.1	4.9	1.0	1.1	0.4	2.3	1.3	0	3.7	3.7	3.7	0	13.9				
REC	14.5	13.5	14.3	1.1	4.9	1.0	1.1	0.4	2.3	1.3	0	3.7	3.7	3.7	0	13.9				
F.F	14.5	13.8	14.3	1.1	4.9	1.0	1.1	0.4	2.3	1.3	0	3.7	3.7	3.7	0	13.9				
REW	14.5	14.2	14.3	1.1	4.9	1.0	1.1	0.4	2.3	1.3	0	3.7	3.7	3.7	0	14.5				
REF.NO.	IC6001																			
PIN.NO.	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
STOP	4.4	0	2.3	0	3.5	4.9	4.8	4.6	1.1	0	0	1.7	0	5.1	0	0	0	4.7	0	0
PLAY	4.4	0	2.3	0	3.5	4.9	4.8	4.6	3.4	0	4.6	1.7	0	5.1	4.7	0	4.8	4.2	4.7	0
REC	4.4	0	2.3	0	3.5	4.9	4.8	4.6	2.1	0	4.6	1.7	0	5.1	4.7	0	4.8	4.7	0	0
F.F	4.4	0	2.3	0	3.5	4.9	4.8	4.6	2.1	0	4.9	1.7	0	5.1	0	0	0	4.7	0	0
REW	4.4	0	2.3	0	3.5	4.9	4.8	4.6	2.4	0	4.6	1.7	0	5.1	0	0	3.9	4.3	0	0
REF.NO.	IC6001																			
PIN.NO.	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40
STOP	0	0	0	0	4.7	0	0	0	0	0	4.7	0	0	4.7	1.3	1.6	4.8	-	-	0
PLAY	4.7	0	4.7	4.7	4.7	0	0	0	0	0	4.7	0	0	4.7	1.3	1.6	4.8	-	-	0
REC	0	0	4.7	4.7	4.7	4.7	4.7	0	0	4.7	4.7	0	0	4.7	1.3	1.6	4.8	-	-	0
F.F	0	0	0	0	4.7	0	0	0	0	0	4.7	4.7	0	4.7	1.3	1.6	4.8	-	-	0
REW	0	0	0	0	4.7	0	0	0	0	0	4.7	4.7	0	4.7	1.3	1.6	4.8	-	-	0
REF.NO.	IC6001																			
PIN.NO.	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60
STOP	0	0	4.8	4.7	4.7	0	1.6	2.1	0	2.0	2.4	2.0	4.8	1.9	0	0	0	0.2	0	4.7
PLAY	0	0	4.8	4.7	4.7	0	1.6	2.1	0	2.0	2.4	2.0	4.8	1.9	0	0	0	0.2	0	4.7
REC	0	0	4.8	4.7	5.0	0	0	2.1	0	2.0	2.4	2.0	4.8	1.9	0	0	0	0.2	0	4.7
F.F	0	0	4.8	4.7	4.7	0	1.6	2.1	0	2.0	2.4	2.0	4.8	1.9	0	0	0	0.2	0	4.7
REW	0	0	4.8	4.7	4.3	0	1.6	2.1	0	2.0	2.4	2.0	4.8	1.9	0	0	0	0.2	0	4.7
REF.NO.	IC6001																			
PIN.NO.	61	62	63	64	65	66	67	68	69	70	71	72	73	74	75	76	77	78	79	80
STOP	4.7	0	0	4.7	5.1	4.9	4.7	5.0	5.1	4.2	2.8	2.4	0	0	0	0	2.3	5.1	0.1	4.9
PLAY	4.7	0	0	4.7	5.1	4.9	4.7	5.0	5.1	4.2	2.8	2.8	0	0	0.3	2.3	2.3	5.1	0.1	4.9
REC	4.7	0	0	3.5	5.1	4.9	4.7	5.0	5.1	4.2	2.8	2.4	0	0	0.3	2.3	2.3	5.1	4.9	4.9
F.F	4.7	0	0	4.7	5.1	5.1	5.1	5.1	5.1	4.2	3.3	3.2	0	0	4.3	2.7	2.3	5.1	4.9	2.4
REW	4.7	0	0	4.0	4.9	4.7	4.8	5.1	5.1	4.2	3.5	3.4	0	4.7	4.3	4.7	2.3	5.1	2.3	2.4
REF.NO.	IC6001																			
PIN.NO.	81	82	83	84	85	86	87	88	89	90	91	92	93	94	95	96	97	98	99	100
STOP	5.1	5.1	0.3	0	0	2.4	2.4	0	0	1.3	2.4	2.4	0	2.4	2.4	2.4	2.4	4.9	4.9	0
PLAY	5.1	5.1	0.3	0	0	2.4	2.4	0	0	1.3	2.4	2.4	0	2.4	2.4	2.4	2.4	4.9	4.9	0
REC	0	5.1	4.4	0	0	2.4	2.4	0	0	1.3	2.4	2.4	0	2.4	3.5	2.4	2.4	4.9	4.9	0
F.F	0	5.1	0.3	0	0	2.4	2.4	0	0	1.3	2.4	2.4	0	2.4	2.4	2.4	2.4	4.9	4.9	1.4
REW	0	5.1	0.3	0	0	2.4	2.4	0	0	1.3	2.4	2.4	0	2.4	2.4	2.4	2.4	4.9	4.9	1.4
REF.NO.	IC1501					IC1502														
PIN.NO.	1	2	3	4		1	2	3	4											
STOP	1.1	2.2	4.9	0		0	1.1	4.9	0											
PLAY	1.1	2.2	4.9	0		0	1.1	4.9	0											
REC	1.1	2.2	4.9	0		0	1.1	4.9	0											
F.F	1.1	2.2	2.3	0		0	1.1	2.3	0											
REW	1.1	2.2	2.3	0		0	1.1	2.3	0											

SYSTEM CONTROL & SERVO TRs DC VOLTAGE CHART (SP MODE)

REF.NO.	Q1501			Q1502			Q7802											
PIN.NO.	+	-		+	-		E	C	B									
STOP	4.6	0		4.8	0		1.4	4.8	1.9									
PLAY	4.6	0		4.8	0		1.4	4.8	1.9									
REC	4.6	0		4.8	0		1.4	4.8	1.9									
F.F	4.6	0		4.8	0		1.4	4.8	1.9									
REW	4.6	0		4.8	0		1.4	4.8	1.9									
REF.NO.	QR6002			QR6003			QR6004			QR6005			QR6006			QR6007		
PIN.NO.	E	C	B	E	C	B	E	C	B	E	C	B	E	C	B	E	C	B
STOP	0	0	4.7	0	0	0	0	2.6	0	0	0	2.6	0	5.1	0	5.1	0	5.1
PLAY	0	0	4.7	0	2.0	0	0	2.6	0	0	0	2.6	0	5.1	0	5.1	0	5.1
REC	0	0	4.7	0	0	0	0	2.6	0	0	0	2.6	0	5.1	0	5.1	0	5.1
F.F	0	0	4.7	0	0	0	0	2.6	0	0	0	2.6	0	5.1	0	5.1	0	5.1
REW	0	0	4.7	0	0	0	0	2.6	0	0	0	2.6	0	5.1	0	5.1	0	5.1

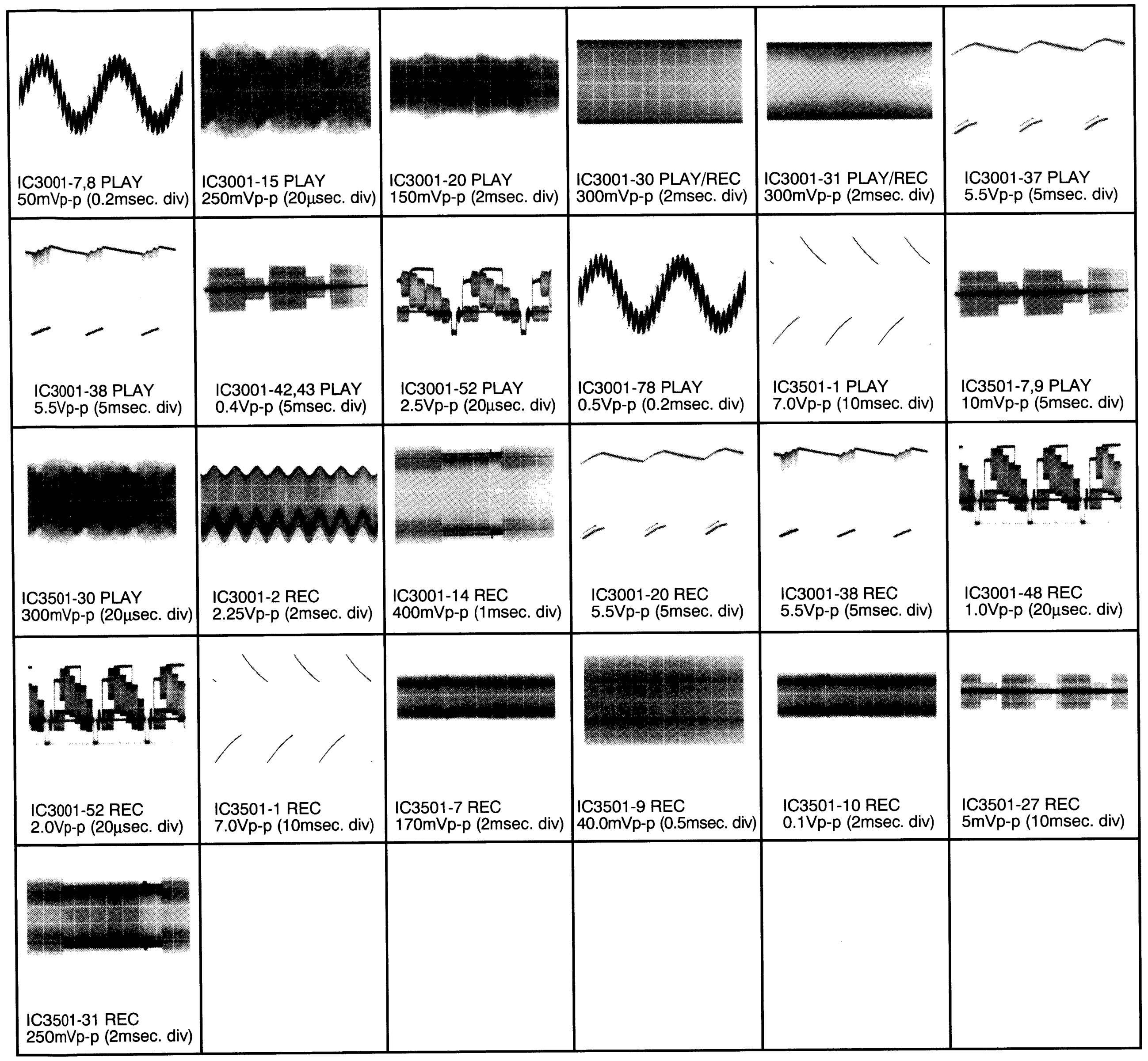
7.3. VIDEO SECTION IN MAIN SCHEMATIC DIAGRAM


Ⓐ :TO AUDIO SECTION
Ⓢ :TO SYSTEM CONTROL & SERVO / TIMER SECTION
Ⓘ :TO INPUT/OUTPUT & TUNER SECTION
Ⓞ :TO OSD SECTION
VIDEO MAIN SIGNAL PATH IN PLAYBACK MODE
VIDEO MAIN SIGNAL PATH IN REC MODE
AUDIO MAIN SIGNAL PATH IN PLAYBACK MODE
AUDIO MAIN SIGNAL PATH IN REC MODE
C SYNC
V OUT TO Y/C
TUN V IN
VIDEO FROM Y/C
ART V/H/N
BIAS(H)
BIAS 5V
SHORT DET(L)
IIC CLK
IIC DATAS
PS 5V
QR4004
UN2212
(BIAS Ⓗ: ON)
Q4007
2SD602A
(BIAS OSC)
T4001
EQQ7QF024P
Q4006
2SB710A
(BIAS POWER ON/OFF)
P4002
F ER OUT
F ER IN
(TO FE HEAD)
P4003
A E IN
GND(N)
A HEAD R
A HEAD W
CTL HEAD(-)
CTL HEAD(+)
(TO A/C HEAD)
CTL HEAD(+)
CTL HEAD(-)
MUTE(H)
NOR TO Y/C
TUN AUDIO IN
H A SW
H SW
ENV SEL
GND(D)
LP(H)
V SYNC(L)
F ADJ
DA REC(H)
RF C OUT 1
A. MUTE
VCC
ROTARY SW
FSC
TRK ENVE
D REC(H)
P3502
LP R
COM
LP L
SP R'
SP COM
SP L'
GND
AL
A COM
AR
(TO CYL. HEAD)
AR
A COM
AL
IC3501
AN3368SB
QR4001
UN2217
(MUTE)
QR4002
UN2213
(INV.)
Q4002
2SD601A
(SWITCHING)
Q4001
2SD1149
(SWITCHING)
QR4006
UN2111
(DA REC Ⓗ)
D3001
MA165TA5VT
IC3001
TDA9735HV3
QR3007
UN2212
(LP(Ⓗ): ON)
QR3006
UN2212
(V SYNC Ⓛ: ON)
Q3003
2SB709A
(AMP)
X3001
VSX0162
TW3001
TW3030
YNR PROC
YNR MIXER
YNR AGC
SYNC SEP
AGC DET
AGC
NOISE CLIP
ARTIF SYNC
CPN
CPS
SEC SWITCH
SUB BPF
SP -3dB
FAMI
NOR-COR
1H-DL
2H-DL
CK-SW S-PILOT ERASE
SCL (I2C BUS) SDA
DELAY
LPFA
BM-A
BM-B
NAP
MAIN BPF
BURST U/D
2.2 TRAP
6.6 TRAP
12C TINT
SECAM ID
DET ACC
CACC DET
CACC
-6dB NTSC-EP/SP
BPF 630
ROT2
ROTAPC
APC CK DET
2fsc BPF
X 2
VXO
VV/SEC/ MUTE
DIVIDER SUBMIXER LPF
F DET
PAL M- IDENT
SLD
REC AFC
TIMER
MUTE
:40
CHROMA GAIN
CHROMA REC
SECAM-L REC
REC-Y ADJ
TRAP & HPF
HTRAP
RF AGC
DET
PEAKING
DOUBLE LIM
ENV DET
REC-C ADJ
S VHS FODET
MOD
FMDEM
SUB LPF
NLE NLDE
DTE
DELAY
HAIN LPF
W/DC ADJ
DET
CLP2
CLP1
CLP3
DOP
NORM
NC1
NC2
PICT
DEV ADJ
+2.5dB
Y/C MIXER
SUB CLP
(VIDEO OUT SELECT)
FH TRAP
ALC
SW GAIN
ZAP
HA1
HA2
HA3
HA4
A IN 3
A IN 2
A IN 1
MUTE
EE/VV
LP/EP ON
A EE-ON
PAL SP-ON
SP-ON
V MUTE
E
D
C
B
A
1
2
3
4
5
6
7
8
9

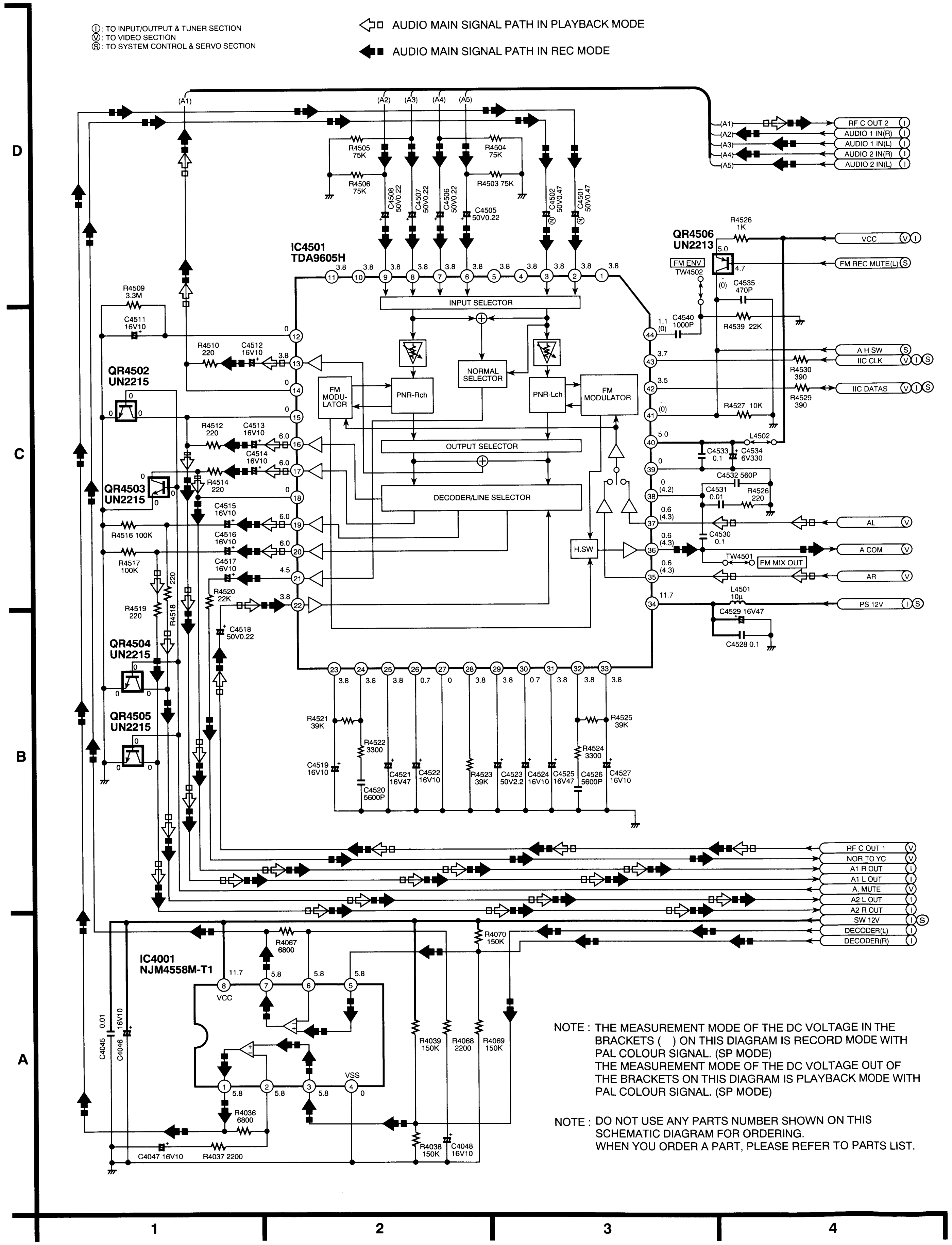
NOTE : THE MEASUREMENT MODE OF THE DC VOLTAGE IN THE BRACKETS ( ) ON THIS DIAGRAM IS RECORD MODE WITH PAL COLOUR SIGNAL. (SP MODE)
THE MEASUREMENT MODE OF THE DC VOLTAGE OUT OF THE BRACKETS ON THIS DIAGRAM IS PLAYBACK MODE WITH PAL COLOUR SIGNAL. (SP MODE)

NOTE : DO NOT USE ANY PARTS NUMBER SHOWN ON THIS SCHEMATIC DIAGRAM FOR ORDERING.
WHEN YOU ORDER A PART, PLEASE REFER TO PARTS LIST.

VIDEO SECTION IN MAIN WAVEFORM CHART (SP MODE)


IC3001-7,8 PLAY 50mVp-p (0.2msec. div)
IC3001-15 PLAY 250mVp-p (20μsec. div)
IC3001-20 PLAY 150mVp-p (2msec. div)
IC3001-30 PLAY/REC 300mVp-p (2msec. div)
IC3001-31 PLAY/REC 300mVp-p (2msec. div)
IC3001-37 PLAY 5.5Vp-p (5msec. div)
IC3001-38 PLAY 5.5Vp-p (5msec. div)
IC3001-42,43 PLAY 0.4Vp-p (5msec. div)
IC3001-52 PLAY 2.5Vp-p (20μsec. div)
IC3001-78 PLAY 0.5Vp-p (0.2msec. div)
IC3501-1 PLAY 7.0Vp-p (10msec. div)
IC3501-7,9 PLAY 10mVp-p (5msec. div)
IC3501-30 PLAY 300mVp-p (20μsec. div)
IC3001-2 REC 2.25Vp-p (2msec. div)
IC3001-14 REC 400mVp-p (1msec. div)
IC3001-20 REC 5.5Vp-p (5msec. div)
IC3001-38 REC 5.5Vp-p (5msec. div)
IC3001-48 REC 1.0Vp-p (20μsec. div)
IC3001-52 REC 2.0Vp-p (20μsec. div)
IC3501-1 REC 7.0Vp-p (10msec. div)
IC3501-7 REC 170mVp-p (2msec. div)
IC3501-9 REC 40.0mVp-p (0.5msec. div)
IC3501-10 REC 0.1Vp-p (2msec. div)
IC3501-27 REC 5mVp-p (10msec. div)
IC3501-31 REC 250mVp-p (2msec. div)

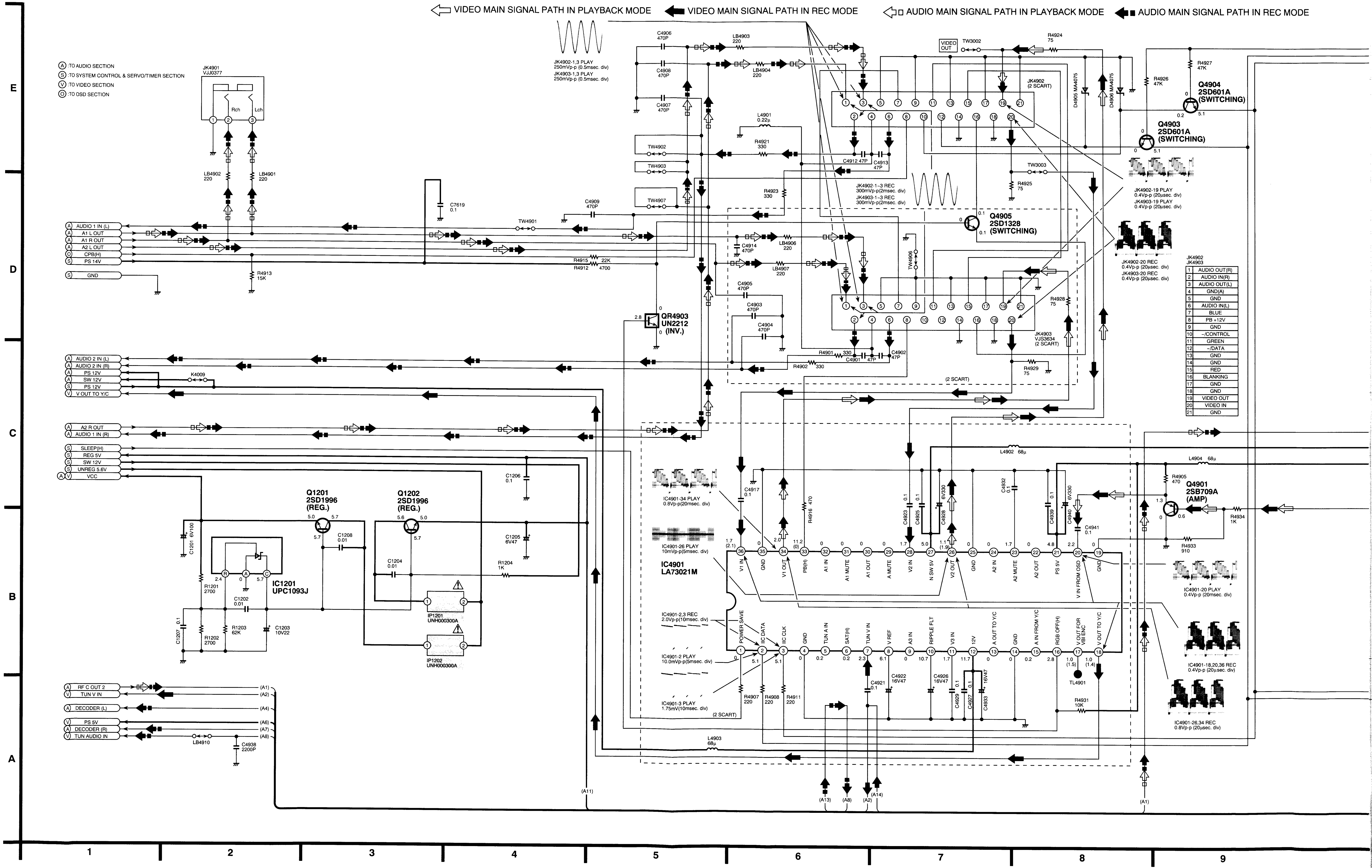
7.4. Hi-Fi AUDIO SECTION IN MAIN SCHEMATIC DIAGRAM


Ⓘ : TO INPUT/OUTPUT & TUNER SECTION
Ⓥ : TO VIDEO SECTION
Ⓢ : TO SYSTEM CONTROL & SERVO SECTION
AUDIO MAIN SIGNAL PATH IN PLAYBACK MODE
AUDIO MAIN SIGNAL PATH IN REC MODE
IC4501
TDA9605H
INPUT SELECTOR
NORMAL SELECTOR
FM MODU-LATOR
PNR-Rch
PNR-Lch
FM MODULATOR
OUTPUT SELECTOR
DECODER/LINE SELECTOR
H.SW
QR4502
UN2215
QR4503
UN2215
QR4504
UN2215
QR4505
UN2215
QR4506
UN2213
FM ENV
TW4502
TW4501
FM MIX OUT
IC4001
NJM4558M-T1
VCC
VSS
RF C OUT 2
AUDIO 1 IN(R)
AUDIO 1 IN(L)
AUDIO 2 IN(R)
AUDIO 2 IN(L)
VCC
FM REC MUTE(L)
A H SW
IIC CLK
IIC DATAS
AL
A COM
AR
PS 12V
RF C OUT 1
NOR TO YC
A1 R OUT
A1 L OUT
A. MUTE
A2 L OUT
A2 R OUT
SW 12V
DECODER(L)
DECODER(R)
D
C
B
A
1
2
3
4

NOTE : THE MEASUREMENT MODE OF THE DC VOLTAGE IN THE BRACKETS ( ) ON THIS DIAGRAM IS RECORD MODE WITH PAL COLOUR SIGNAL. (SP MODE)
THE MEASUREMENT MODE OF THE DC VOLTAGE OUT OF THE BRACKETS ON THIS DIAGRAM IS PLAYBACK MODE WITH PAL COLOUR SIGNAL. (SP MODE)

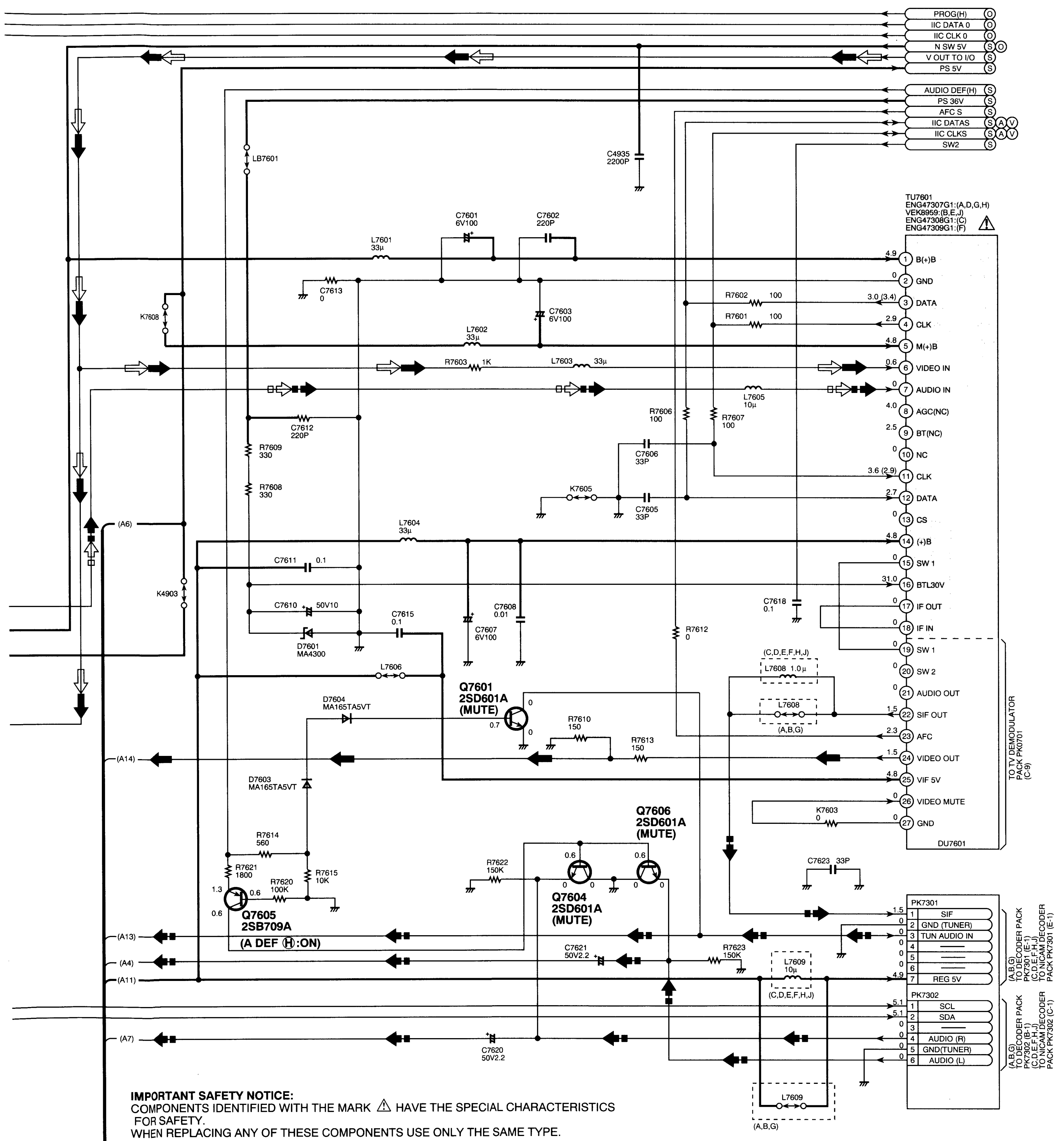
NOTE : DO NOT USE ANY PARTS NUMBER SHOWN ON THIS SCHEMATIC DIAGRAM FOR ORDERING.
WHEN YOU ORDER A PART, PLEASE REFER TO PARTS LIST.

7.5. INPUT/OUTPUT & TUNER SECTION IN MAIN SCHEMATIC DIAGRAM


VIDEO MAIN SIGNAL PATH IN PLAYBACK MODE
VIDEO MAIN SIGNAL PATH IN REC MODE
AUDIO MAIN SIGNAL PATH IN PLAYBACK MODE
AUDIO MAIN SIGNAL PATH IN REC MODE
Ⓐ :TO AUDIO SECTION
Ⓢ :TO SYSTEM CONTROL & SERVO/TIMER SECTION
Ⓥ :TO VIDEO SECTION
Ⓞ :TO OSD SECTION
JK4901 VJJ0377
Rch
Lch
LB4902 220
LB4901 220
AUDIO 1 IN (L)
A1 L OUT
A1 R OUT
A2 L OUT
CPB(H)
PS 14V
GND
R4913 15K
C7619 0.1
TW4901
C4909 470P
R4915 22K
R4912 4700
AUDIO 2 IN (L)
AUDIO 2 IN (R)
PS 12V
SW 12V
PS 12V
V OUT TO Y/C
K4009
A2 R OUT
AUDIO 1 IN (R)
SLEEP(H)
REG 5V
SW 12V
UNREG 5.6V
VCC
Q1201 2SD1996 (REG.)
Q1202 2SD1996 (REG.)
C1208 0.01
C1206 0.1
C1205 6V47
C1204 0.01
R1204 1K
C1201 6V100
R1201 2700
IC1201 UPC1093J
C1202 0.01
R1203 62K
C1203 10V22
C1207 0.1
R1202 2700
IP1201 UNH000300A
IP1202 UNH000300A
RF C OUT 2
TUN V IN
DECODER (L)
PS 5V
DECODER (R)
TUN AUDIO IN
LB4910
C4938 2200P
(A1) (A2) (A4) (A6) (A7) (A8)
(A11)
C4906 470P
C4908 470P
C4907 470P
LB4903 220
LB4904 220
JK4902-1,3 PLAY 250mVp-p (0.5msec. div)
JK4903-1,3 PLAY 250mVp-p (0.5msec. div)
L4901 0.22µ
R4921 330
TW4902
TW4903
TW4907
C4912 47P
C4913 47P
R4923 330
JK4902-1~3 REC 300mVp-p(2msec. div)
JK4903-1~3 REC 300mVp-p(2msec. div)
VIDEO OUT
TW3002
R4924 75
JK4902 (2 SCART)
D4905 MA4075
D4906 MA4075
R4926 47K
R4927 47K
Q4904 2SD601A (SWITCHING)
Q4903 2SD601A (SWITCHING)
TW3003
R4925 75
JK4902-19 PLAY 0.4Vp-p (20µsec. div)
JK4903-19 PLAY 0.4Vp-p (20µsec. div)
Q4905 2SD1328 (SWITCHING)
C4914 470P
LB4906 220
LB4907 220
TW4906
C4905 470P
C4903 470P
C4904 470P
QR4903 UN2212 (INV.)
JK4902-20 REC 0.4Vp-p (20µsec. div)
JK4903-20 REC 0.4Vp-p (20µsec. div)
R4928 75
JK4903 VJS3634 (2 SCART)
R4901 330
C4901 47P
C4902 47P
R4902 330
R4929 75
(2 SCART)
L4902 68µ
L4904 68µ
C4917 0.1
IC4901-34 PLAY 0.8Vp-p(20msec. div)
IC4901-26 PLAY 10mVp-p(5msec. div)
IC4901 LA73021M
R4916 470
C4923 0.1
C4925 0.1
C4928 6V330
C4932 0.1
C4939 0.1
C4940 6V330
C4941 0.1
V1 IN
GND
V1 OUT
PB(H)
A1 IN
A1 MUTE
A1 OUT
A MUTE
V2 IN
N SW 5V
V2 OUT
GND
A2 IN
A2 MUTE
A2 OUT
PS 5V
V IN FROM OSD
GND
POWER SAVE
IIC DATA
IIC CLK
GND
TUN A IN
SAT(H)
TUN V IN
V REF
A3 IN
RIPPLE FLT
V3 IN
12V
A OUT TO Y/C
GND
A IN FROM Y/C
RGB OFF(H)
V OUT FOR VBI ENC
V OUT TO Y/C
IC4901-2,3 REC 2.0Vp-p(10msec. div)
IC4901-2 PLAY 10.0mVp-p(5msec. div)
IC4901-3 PLAY 1.75mV(10msec. div)
(2 SCART)
R4907 220
R4908 220
R4911 220
C4921 0.1
C4922 16V47
C4926 16V47
C4929 0.1
C4927 0.1
C4933 16V47
TL4901
R4931 10K
L4903 68µ
(A13) (A8) (A2) (A14)
R4905 470
Q4901 2SB709A (AMP)
R4934 1K
R4933 910
IC4901-20 PLAY 0.4Vp-p (20msec. div)
IC4901-18,20,36 REC 0.4Vp-p (20µsec. div)
IC4901-26,34 REC 0.8Vp-p (20µsec. div)
(A1)
E
D
C
B
A
1
2
3
4
5
6
7
8
9

JK4902
JK4903

1	AUDIO OUT(R)
2	AUDIO IN(R)
3	AUDIO OUT(L)
4	GND(A)
5	GND
6	AUDIO IN(L)
7	BLUE
8	PB +12V
9	GND
10	–/CONTROL
11	GREEN
12	–/DATA
13	GND
14	GND
15	RED
16	BLANKING
17	GND
18	GND
19	VIDEO OUT
20	VIDEO IN
21	GND

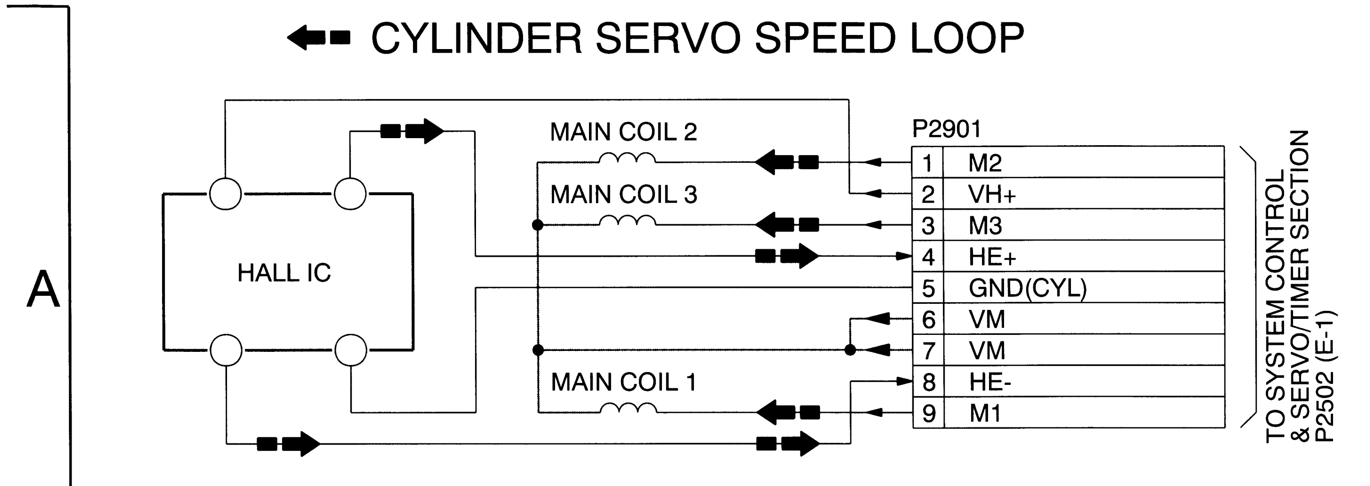

PROG(H)
IIC DATA 0
IIC CLK 0
N SW 5V
V OUT TO I/O
PS 5V
AUDIO DEF(H)
PS 36V
AFC S
IIC DATAS
IIC CLKS
SW2
LB7601
C4935 2200P
TU7601
ENG47307G1:(A,D,G,H)
VEK8959:(B,E,J)
ENG47308G1:(C)
ENG47309G1:(F)
C7601 6V100
C7602 220P
L7601 33µ
C7613 0
K7608
C7603 6V100
L7602 33µ
R7602 100
R7601 100
R7603 1K
L7603 33µ
L7605 10µ
R7606 100
R7607 100
C7612 220P
R7609 330
R7608 330
C7606 33P
K7605
C7605 33P
(A6)
L7604 33µ
C7611 0.1
K4903
C7610 50V10
C7615 0.1
C7608 0.01
C7607 6V100
C7618 0.1
R7612 0
D7601 MA4300
L7606
(C,D,E,F,H,J)
L7608 1.0µ
(A,B,G)
D7604 MA165TA5VT
Q7601 2SD601A (MUTE)
R7610 150
R7613 150
(A14)
D7603 MA165TA5VT
Q7606 2SD601A (MUTE)
K7603 0
R7614 560
R7621 1800
R7620 100K
R7615 10K
Q7605 2SB709A
(A DEF Ⓗ:ON)
R7622 150K
Q7604 2SD601A (MUTE)
C7623 33P
C7621 50V2.2
R7623 150K
L7609 10µ
(A13)
(A4)
(A11)
(A7)
C7620 50V2.2
L7609
1 B(+)B
2 GND
3 DATA
4 CLK
5 M(+)B
6 VIDEO IN
7 AUDIO IN
8 AGC(NC)
9 BT(NC)
10 NC
11 CLK
12 DATA
13 CS
14 (+)B
15 SW 1
16 BTL30V
17 IF OUT
18 IF IN
19 SW 1
20 SW 2
21 AUDIO OUT
22 SIF OUT
23 AFC
24 VIDEO OUT
25 VIF 5V
26 VIDEO MUTE
27 GND
DU7601
TO TV DEMODULATOR PACK PK0701 (C-9)
PK7301
1 SIF
2 GND (TUNER)
3 TUN AUDIO IN
7 REG 5V
(A,B,G) TO DECODER PACK PK7301 (E-1) (C,D,E,F,H,J) TO NICAM DECODER PACK PK7301 (E-1)
PK7302
1 SCL
2 SDA
4 AUDIO (R)
5 GND(TUNER)
6 AUDIO (L)
(A,B,G) TO DECODER PACK PK7302 (B-1) (C,D,E,F,H,J) TO NICAM DECODER PACK PK7302 (C-1)
10
11
12
13

IMPORTANT SAFETY NOTICE:
COMPONENTS IDENTIFIED WITH THE MARK ⚠ HAVE THE SPECIAL CHARACTERISTICS FOR SAFETY.
WHEN REPLACING ANY OF THESE COMPONENTS USE ONLY THE SAME TYPE.

NOTE : THE MEASUREMENT MODE OF THE DC VOLTAGE IN THE BRACKETS ( ) ON THIS DIAGRAM IS RECORD MODE WITH PAL COLOUR SIGNAL. (SP MODE)
THE MEASUREMENT MODE OF THE DC VOLTAGE OUT OF THE BRACKETS ON THIS DIAGRAM IS PLAYBACK MODE WITH PAL COLOUR SIGNAL. (SP MODE)

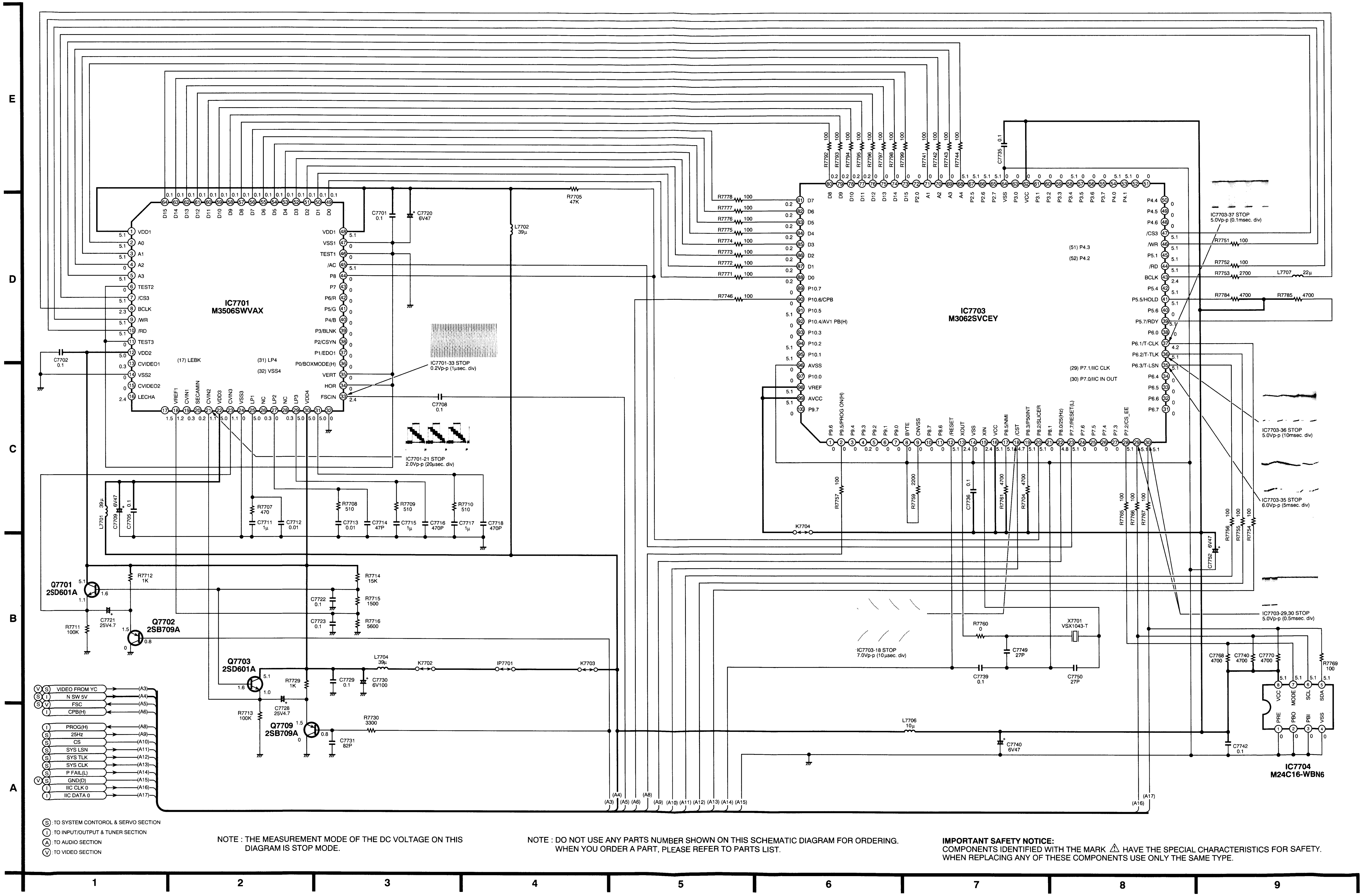
NOTE : DO NOT USE ANY PARTS NUMBER SHOWN ON THIS SCHEMATIC DIAGRAM FOR ORDERING.
WHEN YOU ORDER A PART, PLEASE REFER TO PARTS LIST.

7.6. CYLINDER MOTOR UNIT SCHEMATIC DIAGRAM


CYLINDER SERVO SPEED LOOP
A
HALL IC
MAIN COIL 2
MAIN COIL 3
MAIN COIL 1
P2901
1 M2
2 VH+
3 M3
4 HE+
5 GND(CYL)
6 VM
7 VM
8 HE-
9 M1
TO SYSTEM CONTROL & SERVO/TIMER SECTION P2502 (E-1)

NOTE: DO NOT USE ANY PART NUMBER SHOWN ON THIS SCHEMATIC DIAGRAM FOR ORDERING.WHEN YOU ORDER A PART,PLEASE REFER TO PARTS LIST.

7.7. OSD SECTION IN MAIN SCHEMATIC DIAGRAM


IC7701
M3506SWVAX
IC7703
M3062SVCEY
IC7704
M24C16-WBN6
Q7701
2SD601A
Q7702
2SB709A
Q7703
2SD601A
Q7709
2SB709A
X7701
VSX1043-T
IC7701-33 STOP
0.2Vp-p (1μsec. div)
IC7701-21 STOP
2.0Vp-p (20μsec. div)
IC7703-37 STOP
5.0Vp-p (0.1msec. div)
IC7703-36 STOP
5.0Vp-p (10msec. div)
IC7703-35 STOP
6.0Vp-p (5msec. div)
IC7703-29,30 STOP
5.0Vp-p (0.5msec. div)
IC7703-18 STOP
7.0Vp-p (10μsec. div)
VIDEO FROM YC
N SW 5V
FSC
CPB(H)
PROG(H)
25Hz
CS
SYS LSN
SYS TLK
SYS CLK
P FAIL(L)
GND(D)
IIC CLK 0
IIC DATA 0
E
D
C
B
A
1
2
3
4
5
6
7
8
9

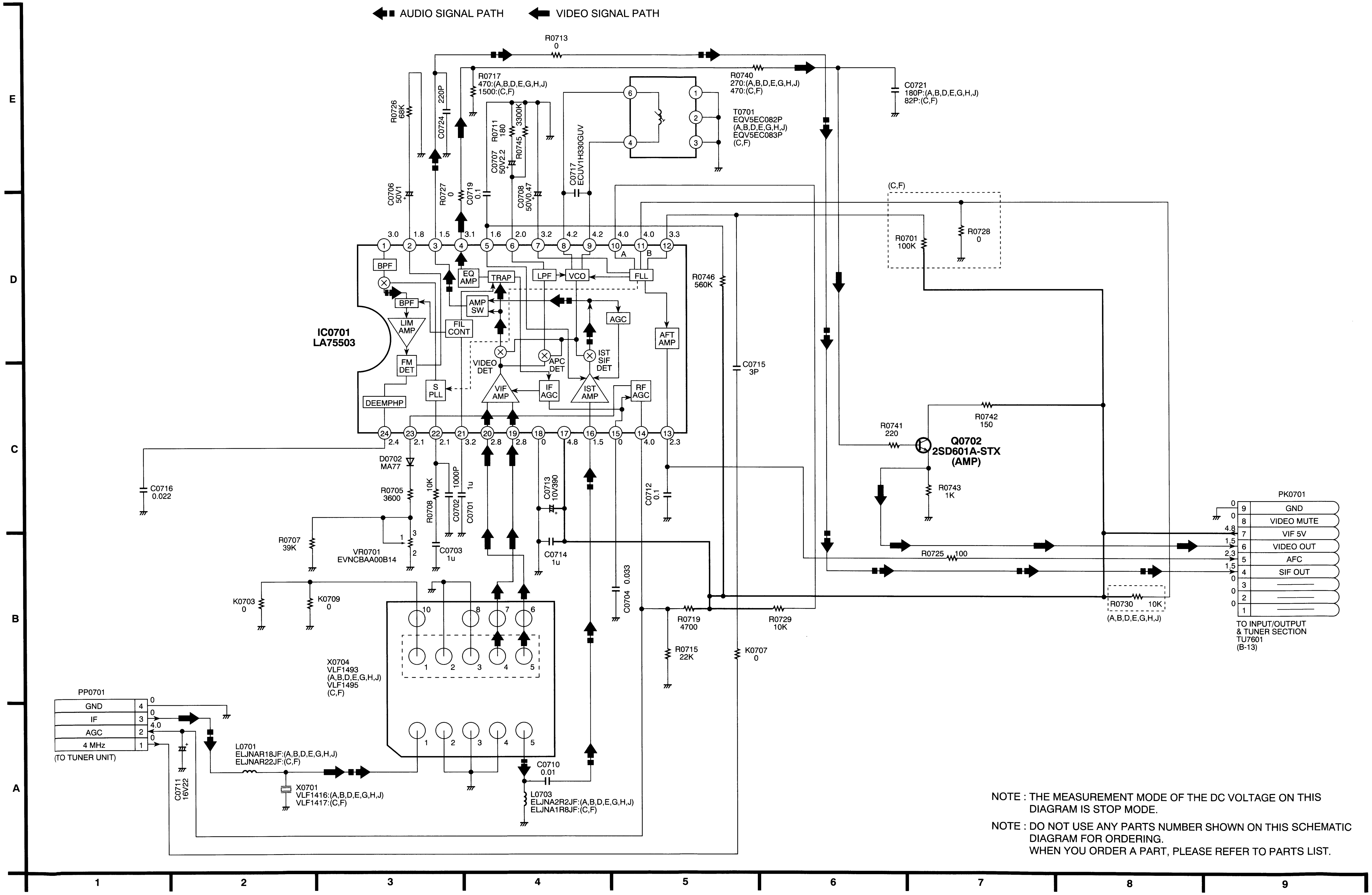
Ⓢ: TO SYSTEM CONTOROL & SERVO SECTION
Ⓘ: TO INPUT/OUTPUT & TUNER SECTION
Ⓐ: TO AUDIO SECTION
Ⓥ: TO VIDEO SECTION

NOTE : THE MEASUREMENT MODE OF THE DC VOLTAGE ON THIS DIAGRAM IS STOP MODE.

NOTE : DO NOT USE ANY PARTS NUMBER SHOWN ON THIS SCHEMATIC DIAGRAM FOR ORDERING. WHEN YOU ORDER A PART, PLEASE REFER TO PARTS LIST.

IMPORTANT SAFETY NOTICE:
COMPONENTS IDENTIFIED WITH THE MARK ⚠ HAVE THE SPECIAL CHARACTERISTICS FOR SAFETY.
WHEN REPLACING ANY OF THESE COMPONENTS USE ONLY THE SAME TYPE.

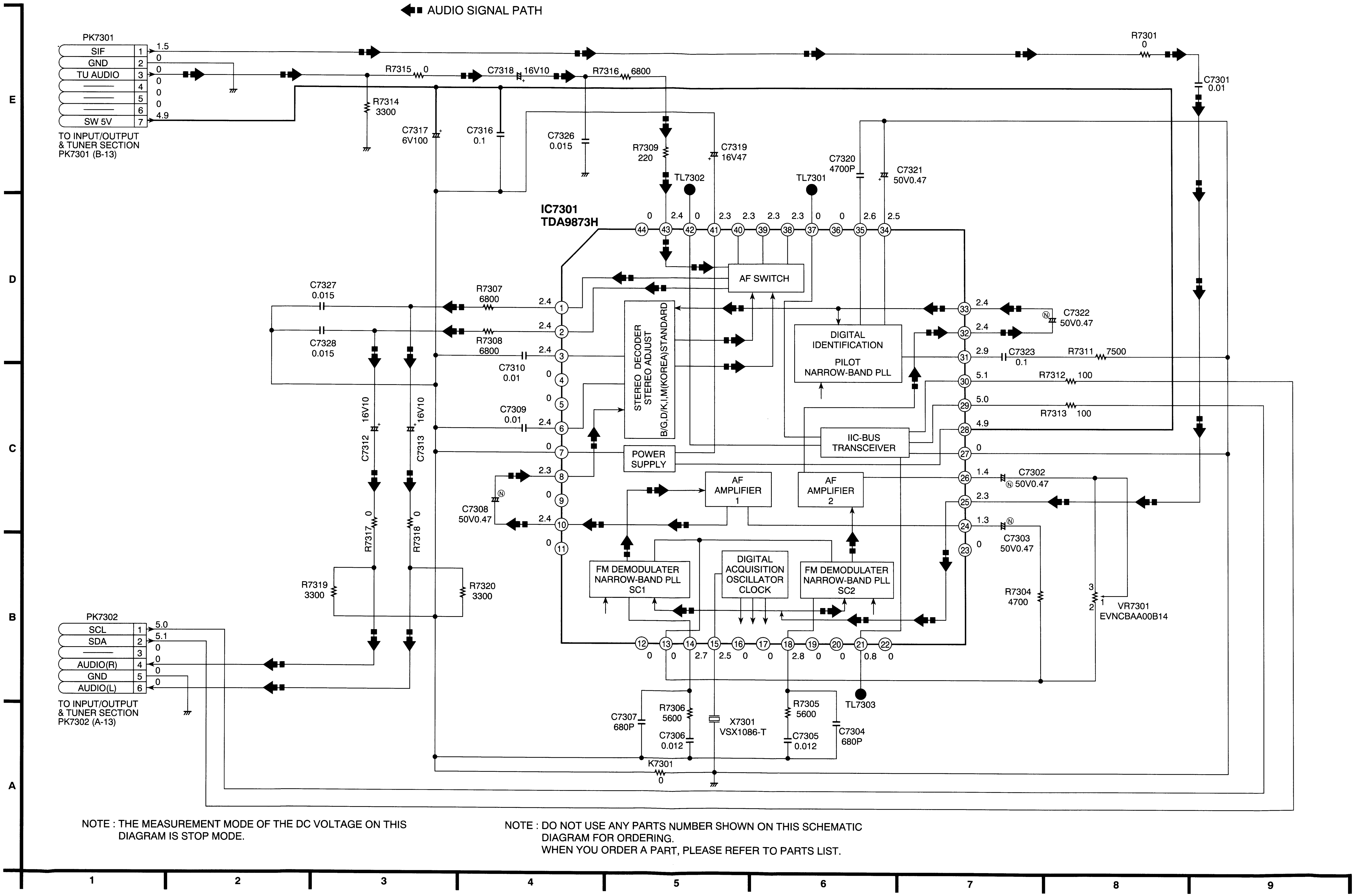
7.8. TV DEMODULATOR PACK SCHEMATIC DIAGRAM


AUDIO SIGNAL PATH
VIDEO SIGNAL PATH
R0713 0
R0717 470:(A,B,D,E,G,H,J) 1500:(C,F)
R0740 270:(A,B,D,E,G,H,J) 470:(C,F)
C0721 180P:(A,B,D,E,G,H,J) 82P:(C,F)
T0701 EQV5EC082P (A,B,D,E,G,H,J) EQV5EC083P (C,F)
R0726 68K
C0724 220P
R0711 180
R0745 3300K
C0707 50V2.2
C0717 ECUV1H330GUV
C0706 50V1
R0727 0
C0719 0.1
C0708 50V0.47
(C,F)
R0701 100K
R0728 0
R0746 560K
C0715 3P
IC0701 LA75503
BPF
EQ AMP
TRAP
LPF
VCO
FLL
AMP SW
AGC
LIM AMP
FIL CONT
AFT AMP
FM DET
VIDEO DET
APC DET
IST SIF DET
S PLL
VIF AMP
IF AGC
IST AMP
RF AGC
DEEMPHP
A
B
3.0 1.8 1.5 3.1 1.6 2.0 3.2 4.2 4.2 4.0 4.0 3.3
2.4 2.1 2.1 3.2 2.8 2.8 0 4.8 1.5 0 4.0 2.3
R0741 220
R0742 150
Q0702 2SD601A-STX (AMP)
R0743 1K
C0716 0.022
D0702 MA77
R0705 3600
R0708 10K
C0702 1000P
C0701 1u
C0713 10V390
C0712 0.1
R0707 39K
VR0701 EVNCBAA00B14
C0703 1u
C0714 1u
C0704 0.033
R0725 100
K0703 0
K0709 0
R0719 4700
R0729 10K
R0730 10K
(A,B,D,E,G,H,J)
R0715 22K
K0707 0
X0704 VLF1493 (A,B,D,E,G,H,J) VLF1495 (C,F)
PK0701
GND
VIDEO MUTE
VIF 5V
VIDEO OUT
AFC
SIF OUT
TO INPUT/OUTPUT & TUNER SECTION TU7601 (B-13)
PP0701
GND
IF
AGC
4 MHz
(TO TUNER UNIT)
L0701 ELJNAR18JF:(A,B,D,E,G,H,J) ELJNAR22JF:(C,F)
X0701 VLF1416:(A,B,D,E,G,H,J) VLF1417:(C,F)
C0711 16V22
C0710 0.01
L0703 ELJNA2R2JF:(A,B,D,E,G,H,J) ELJNA1R8JF:(C,F)
E
D
C
B
A
1
2
3
4
5
6
7
8
9

NOTE : THE MEASUREMENT MODE OF THE DC VOLTAGE ON THIS DIAGRAM IS STOP MODE.

NOTE : DO NOT USE ANY PARTS NUMBER SHOWN ON THIS SCHEMATIC DIAGRAM FOR ORDERING.
WHEN YOU ORDER A PART, PLEASE REFER TO PARTS LIST.

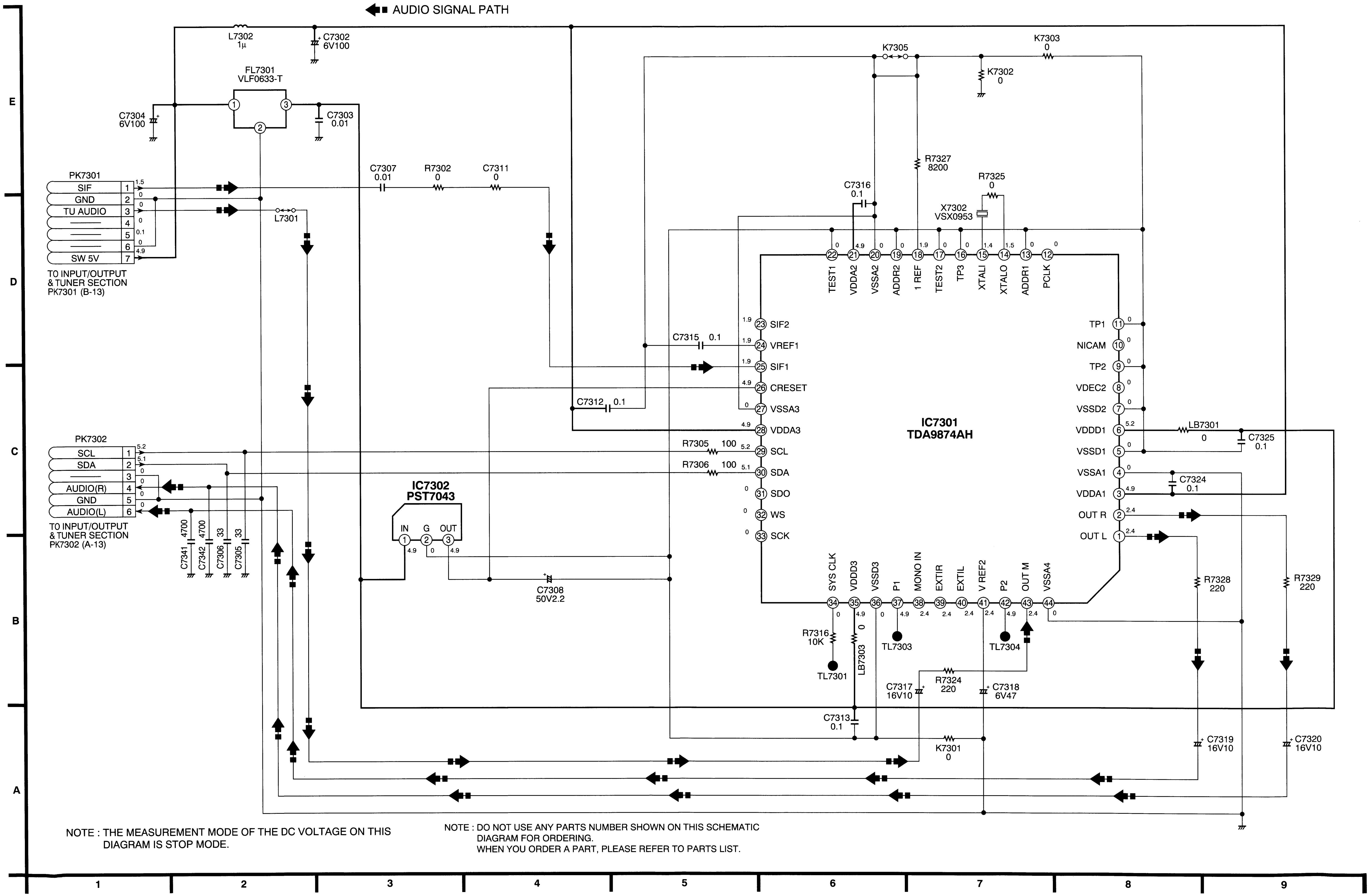
7.9. DECODER PACK SCHEMATIC DIAGRAM


AUDIO SIGNAL PATH
PK7301
1 SIF 1.5
2 GND 0
3 TU AUDIO 0
4 0
5 0
6 0
7 SW 5V 4.9
TO INPUT/OUTPUT & TUNER SECTION PK7301 (B-13)
R7315 0
C7318 16V10
R7316 6800
R7314 3300
C7317 6V100
C7316 0.1
C7326 0.015
R7309 220
C7319 16V47
TL7302
TL7301
C7320 4700P
C7321 50V0.47
R7301 0
C7301 0.01
IC7301
TDA9873H
44 0
43 2.4
42 0
41 2.3
40 2.3
39 2.3
38 2.3
37 0
36 0
35 2.6
34 2.5
AF SWITCH
STEREO DECODER
STEREO ADJUST
B/G,D/K,I,M(KOREA)STANDARD
DIGITAL IDENTIFICATION
PILOT NARROW-BAND PLL
IIC-BUS TRANSCEIVER
POWER SUPPLY
AF AMPLIFIER 1
AF AMPLIFIER 2
FM DEMODULATER NARROW-BAND PLL SC1
DIGITAL ACQUISITION OSCILLATOR CLOCK
FM DEMODULATER NARROW-BAND PLL SC2
C7327 0.015
C7328 0.015
R7307 6800
R7308 6800
C7310 0.01
C7309 0.01
C7308 50V0.47
C7312 16V10
C7313 16V10
R7317 0
R7318 0
R7319 3300
R7320 3300
1 2.4
2 2.4
3 2.4
4 0
5 0
6 2.4
7 0
8 2.3
9 0
10 2.4
11 0
33 2.4
32 2.4
31 2.9
30 5.1
29 5.0
28 4.9
27 0
26 1.4
25 2.3
24 1.3
23 0
C7322 50V0.47
C7323 0.1
R7311 7500
R7312 100
R7313 100
C7302 50V0.47
C7303 50V0.47
R7304 4700
VR7301 EVNCBAA00B14
12 0
13 0
14 2.7
15 2.5
16 0
17 0
18 2.8
19 0
20 0
21 0.8
22 0
TL7303
C7307 680P
R7306 5600
C7306 0.012
X7301 VSX1086-T
R7305 5600
C7305 0.012
C7304 680P
K7301 0
PK7302
1 SCL 5.0
2 SDA 5.1
3 0
4 AUDIO(R) 0
5 GND 0
6 AUDIO(L) 0
TO INPUT/OUTPUT & TUNER SECTION PK7302 (A-13)
E
D
C
B
A
1
2
3
4
5
6
7
8
9

NOTE : THE MEASUREMENT MODE OF THE DC VOLTAGE ON THIS DIAGRAM IS STOP MODE.

NOTE : DO NOT USE ANY PARTS NUMBER SHOWN ON THIS SCHEMATIC DIAGRAM FOR ORDERING.
WHEN YOU ORDER A PART, PLEASE REFER TO PARTS LIST.

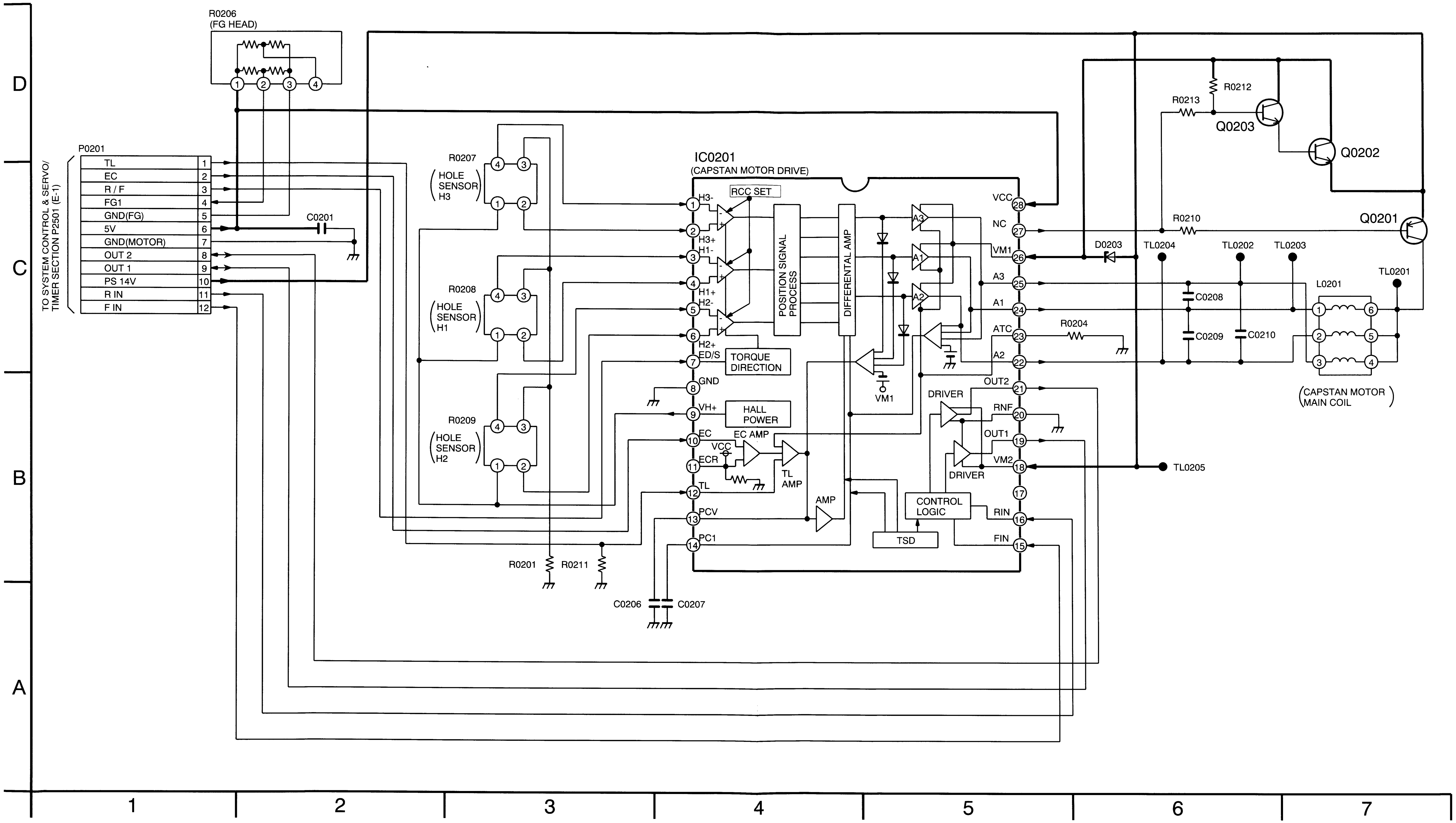
7.10. NICAM DECODER PACK SCHEMATIC DIAGRAM


AUDIO SIGNAL PATH
L7302 1μ
C7302 6V100
FL7301 VLF0633-T
C7303 0.01
C7304 6V100
K7305
K7303 0
K7302 0
R7327 8200
R7325 0
X7302 VSX0953
C7316 0.1
C7307 0.01
R7302 0
C7311 0
L7301
PK7301
SIF
GND
TU AUDIO
SW 5V
TO INPUT/OUTPUT & TUNER SECTION PK7301 (B-13)
PK7302
SCL
SDA
AUDIO(R)
GND
AUDIO(L)
TO INPUT/OUTPUT & TUNER SECTION PK7302 (A-13)
C7341 4700
C7342 4700
C7306 33
C7305 33
IC7302 PST7043
IN G OUT
C7308 50V2.2
C7315 0.1
C7312 0.1
R7305 100
R7306 100
IC7301 TDA9874AH
TEST1 VDDA2 VSSA2 ADDR2 1 REF TEST2 TP3 XTALI XTALO ADDR1 PCLK
SIF2 VREF1 SIF1 CRESET VSSA3 VDDA3 SCL SDA SDO WS SCK
TP1 NICAM TP2 VDEC2 VSSD2 VDDD1 VSSD1 VSSA1 VDDA1 OUT R OUT L
SYS CLK VDDD3 VSSD3 P1 MONO IN EXTIR EXTIL V REF2 P2 OUT M VSSA4
LB7301 0
C7325 0.1
C7324 0.1
R7328 220
R7329 220
R7316 10K
LB7303 0
TL7301
TL7303
TL7304
C7317 16V10
R7324 220
C7318 6V47
C7313 0.1
K7301 0
C7319 16V10
C7320 16V10
E
D
C
B
A
1
2
3
4
5
6
7
8
9

NOTE : THE MEASUREMENT MODE OF THE DC VOLTAGE ON THIS DIAGRAM IS STOP MODE.

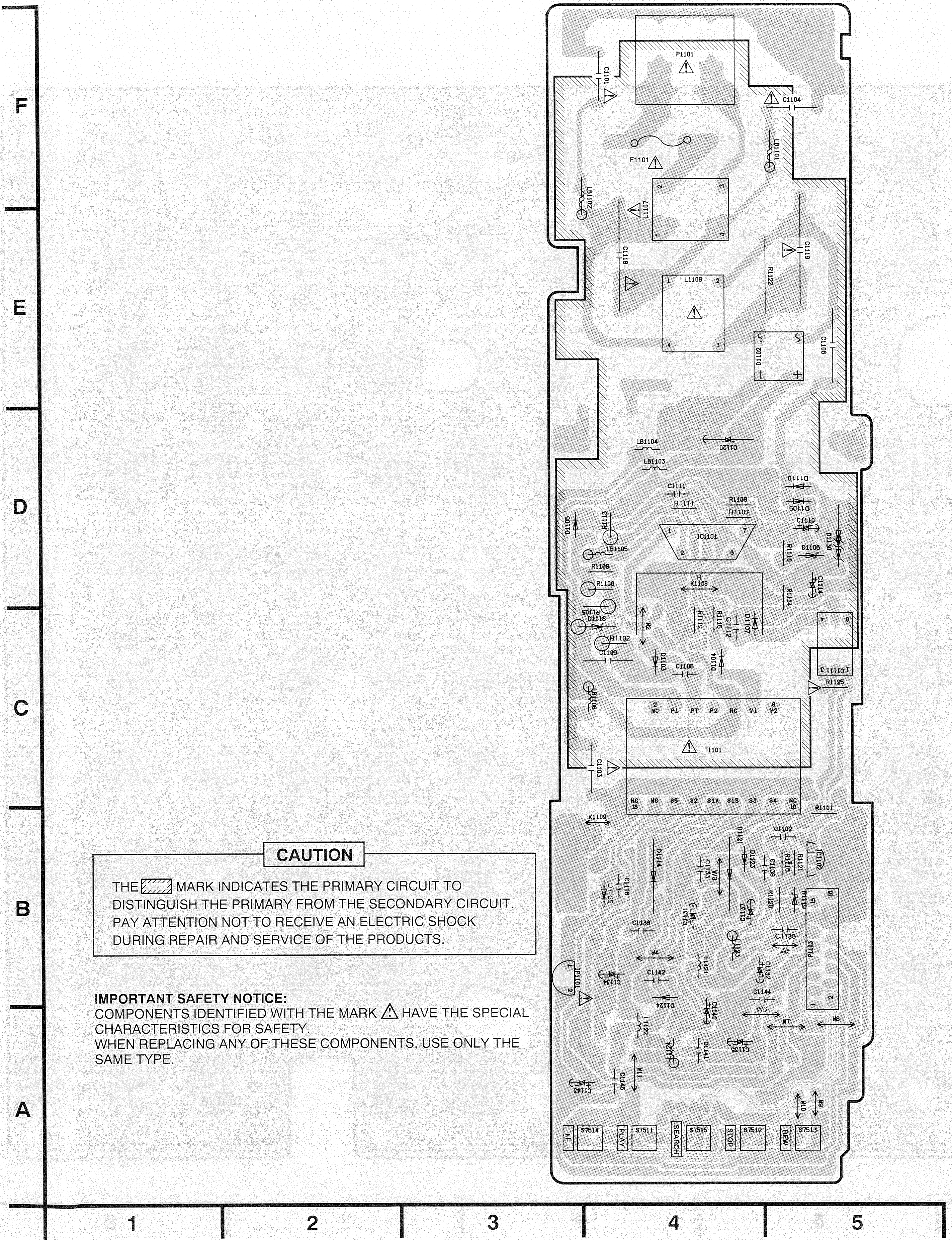
NOTE : DO NOT USE ANY PARTS NUMBER SHOWN ON THIS SCHEMATIC DIAGRAM FOR ORDERING.
WHEN YOU ORDER A PART, PLEASE REFER TO PARTS LIST.

7.11. CAPSTAN DRIVE UNIT SCHEMATIC DIAGRAM


D
C
B
A
1
2
3
4
5
6
7
R0206
(FG HEAD)
P0201
TO SYSTEM CONTROL & SERVO/ TIMER SECTION P2501 (E-1)
TL 1
EC 2
R / F 3
FG1 4
GND(FG) 5
5V 6
GND(MOTOR) 7
OUT 2 8
OUT 1 9
PS 14V 10
R IN 11
F IN 12
C0201
R0207
HOLE SENSOR H3
R0208
HOLE SENSOR H1
R0209
HOLE SENSOR H2
R0201
R0211
C0206
C0207
IC0201
(CAPSTAN MOTOR DRIVE)
RCC SET
H3-
H3+
H1-
H1+
H2-
H2+
ED/S
GND
VH+
EC
ECR
TL
PCV
PC1
TORQUE DIRECTION
HALL POWER
EC AMP
VCC
TL AMP
AMP
POSITION SIGNAL PROCESS
DIFFERENTAL AMP
VM1
TSD
CONTROL LOGIC
DRIVER
DRIVER
A3
A1
A2
VCC
NC
VM1
A3
A1
ATC
A2
OUT2
RNF
OUT1
VM2
RIN
FIN
R0204
R0213
R0212
Q0203
Q0202
Q0201
R0210
D0203
TL0204
TL0202
TL0203
TL0201
TL0205
C0208
C0209
C0210
L0201
(CAPSTAN MOTOR MAIN COIL)

8 CIRCUIT BOARD ASSEMBLIES

8.1. POWER C.B.A. (VEP01826T)

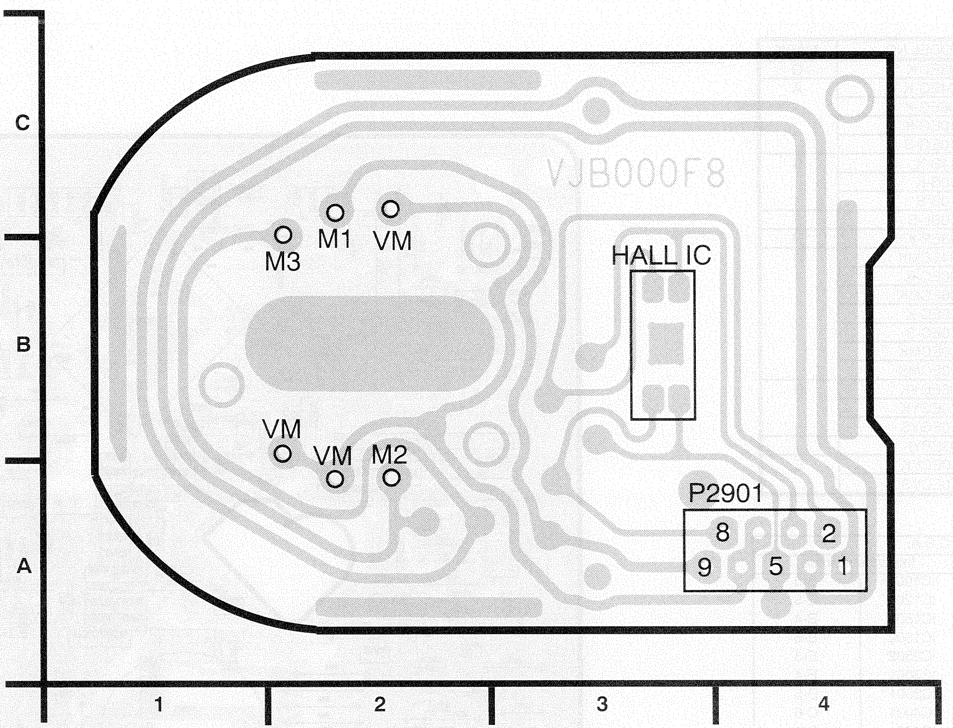

F
E
D
C
B
A
1
2
3
4
5
P1101
C1101
C1104
LB1101
F1101
LB1102
L1107
C1118
L1108
C1119
R1122
D1102
C1106
LB1104
C1120
LB1103
C1111
R1111
R1108
R1107
D1110
D1109
C1110
IC1101
R1113
LB1105
R1109
R1110
D1106
R1106
K1108
R1114
R1112
R1115
C1112
D1107
R1102
C1109
C1108
D1111
R1125
NC P1 PT P2 NC V1 V2
T1101
C1103
NC N6 S5 S2 S1A S1B S3 S4 NC
R1101
K1109
C1102
D1114
D1121
C1136
C1142
C1138
W5
C1144
W6
W7
W8
L1122
C1143
W11
W10
JP1101
S7514
FF
S7511
PLAY
SEARCH
S7515
STOP
S7512
REW
S7513

CAUTION

THE ▨ MARK INDICATES THE PRIMARY CIRCUIT TO DISTINGUISH THE PRIMARY FROM THE SECONDARY CIRCUIT. PAY ATTENTION NOT TO RECEIVE AN ELECTRIC SHOCK DURING REPAIR AND SERVICE OF THE PRODUCTS.

IMPORTANT SAFETY NOTICE:
COMPONENTS IDENTIFIED WITH THE MARK ⚠ HAVE THE SPECIAL CHARACTERISTICS FOR SAFETY.
WHEN REPLACING ANY OF THESE COMPONENTS, USE ONLY THE SAME TYPE.

8.2. CYLINDER MOTOR UNIT


VJB000F8
M1
VM
M3
HALL IC
VM
VM
M2
P2901
8
2
9
5
1
C
B
A
1
2
3
4

CYLINDER MOTOR UNIT	
Integrated Circuit	
HALL IC	B-3
Connector	
P2901	A-4

ADDRESS INFORMATION

8.3. MAIN C.B.A.

PART NO.	MODEL NO.	MARK
VEP06D25A	NV-FJ603EL-K	G
	NV-FJ604EG-K	A
	NV-FJ606EG-K	
	NV-FJ610EG-K	
	NV-FJ610EG-S	
VEP06D25B	NV-FJ611B-K	C
	NV-FJ610B-K	
	NV-FJ610B-S	
VEP06D25C	NV-FJ610BL-S	F
VEP06D25D	NV-FJ603EP-K	H
	NV-FJ604ECMK	D
	NV-FJ606EC-K	
	NV-FJ606ECMK	
	NV-FJ610EC-K	
	NV-FJ610EC-S	
	NV-FJ610ECMK	
	NV-FJ610ECMS	
VEP06D57A	NV-FJ606EGYK	B
	NV-FJ610EGYK	
	NV-FJ610EGYS	
VEP06D57B	NV-FJ603EPYK	J
	NV-FJ610ECYK	E
	NV-FJ610ECYS	

MAIN C.B.A.

Transistor	
Q1001	A-3
Q1002	A-3
Q1003	A-3
Q1004	D-7
Q1005	C-8
Q1006	C-3
Q1009	C-8
Q1010	C-7
Q1201	E-5
Q1202	F-5
Q1501	C-3
Q1502	C-7
Q3003	F-5
Q4001	F-4
Q4002	F-4
Q4006	D-7
Q4007	C-7
Q4901	E-7
Q4903	E-8
Q4904	E-8
Q4905	F-7
Q7601	B-8
Q7604	B-8
Q7605	B-8
Q7606	B-8
Q7701	A-8
Q7702	A-8
Q7703	A-8
Q7709	A-8
Q7802	B-5

Transistor & Resistor	
QR1001	A-3
QR1002	C-5
QR1003	C-8
QR1007	C-7
QR3006	E-5
QR3007	E-5
QR4001	E-4
QR4002	E-4
QR4004	C-7
QR4006	E-4
QR4502	F-6
QR4503	F-6
QR4504	F-6
QR4505	F-6
QR4506	D-6
QR4903	F-8
QR6002	C-5
QR6003	B-4
QR6004	B-3
QR6005	B-3
QR6006	B-5
QR6007	B-4

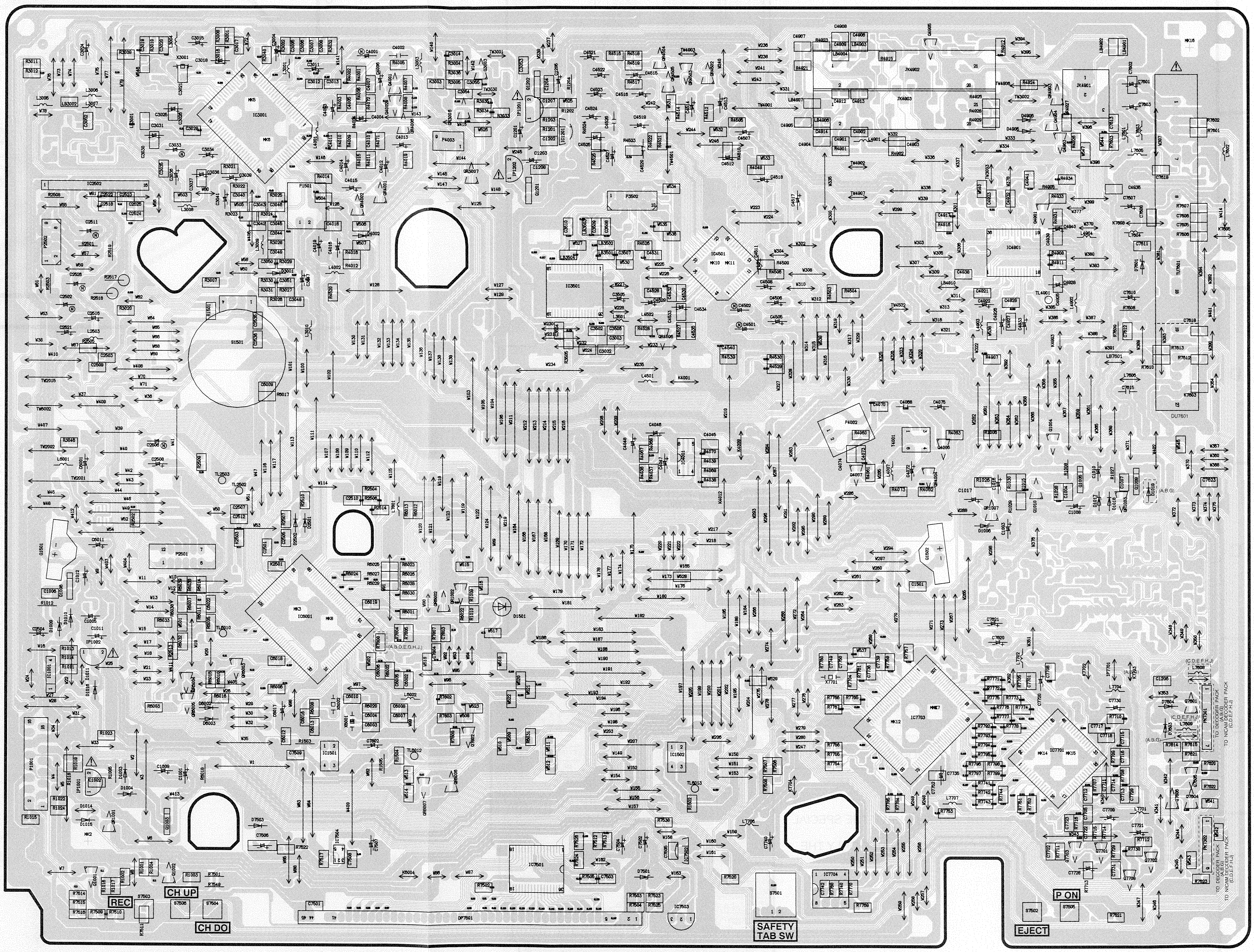
Integrated Circuit	
IC1001	B-3
IC1201	E-5
IC1501	B-4
IC1502	B-6
IC2502	E-3
IC3001	E-4
IC3501	D-5
IC4001	C-6
IC4501	E-6
IC4901	E-7
IC6001	C-4
IC7501	A-5
IC7502	A-6
IC7503	A-6
IC7504	A-4
IC7701	B-7
IC7703	B-7
IC7704	A-6

Test Land	
TL2502	C-4
TL2503	C-3
TL4901	D-7
TL6010	B-3
TL6012	B-4
TL6013	B-6

Test Wire	
TW2001	C-3
TW2002	D-3
TW2015	D-3
TW3002	F-7
TW3003	E-7
TW4501	E-6
TW4502	D-7
TW4901	F-6
TW4902	E-7
TW4903	F-6
TW4906	F-7
TW4907	E-7
TW6002	D-3

Connector	
P1001	B-3
P1501	E-4
P2501	C-3
P2502	E-3
P3502	E-5
P4002	D-6
P4003	E-5
PK7301	B-8
PK7302	A-8
TU7601	E-8

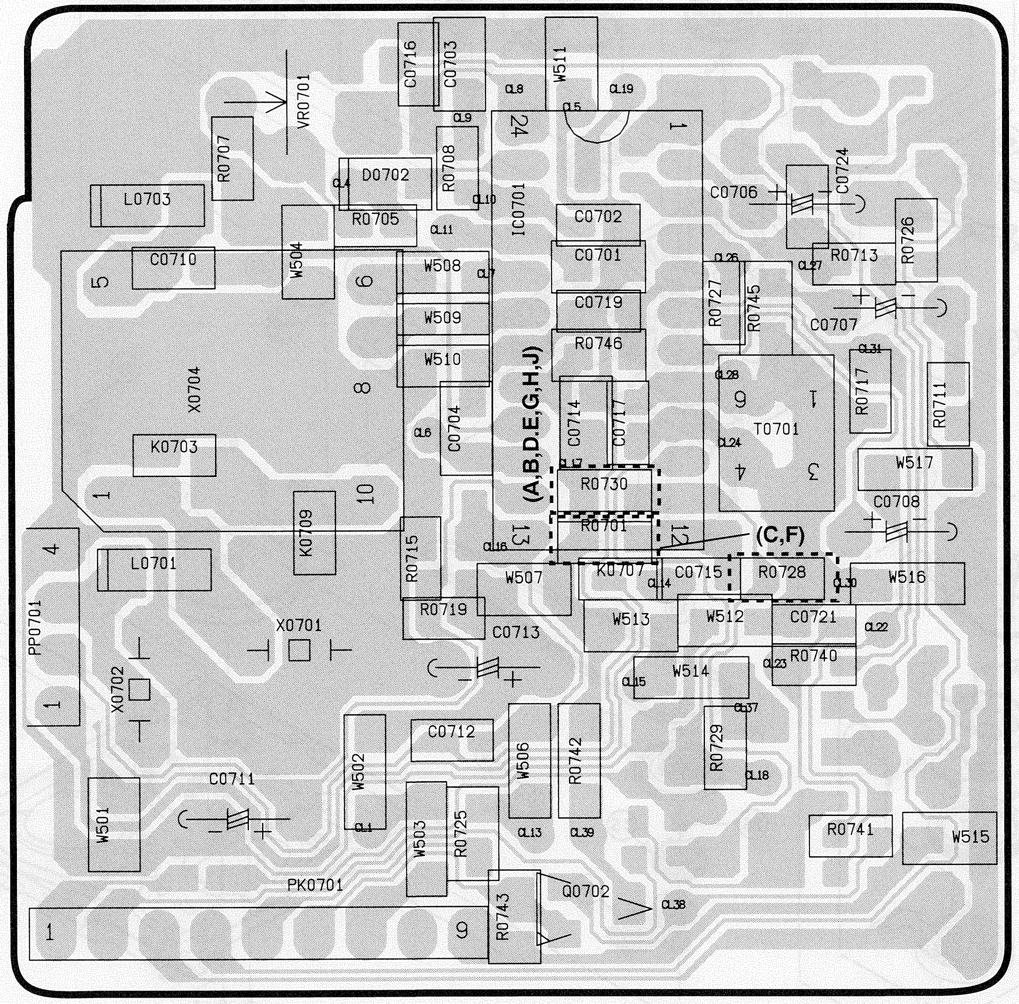
ADDRESS INFORMATION



IMPORTANT SAFETY NOTICE:
COMPONENTS IDENTIFIED WITH THE MARK ⚠ HAVE THE SPECIAL CHARACTERISTICS FOR SAFETY.
WHEN REPLACING ANY OF THESE COMPONENTS, USE ONLY THE SAME TYPE.

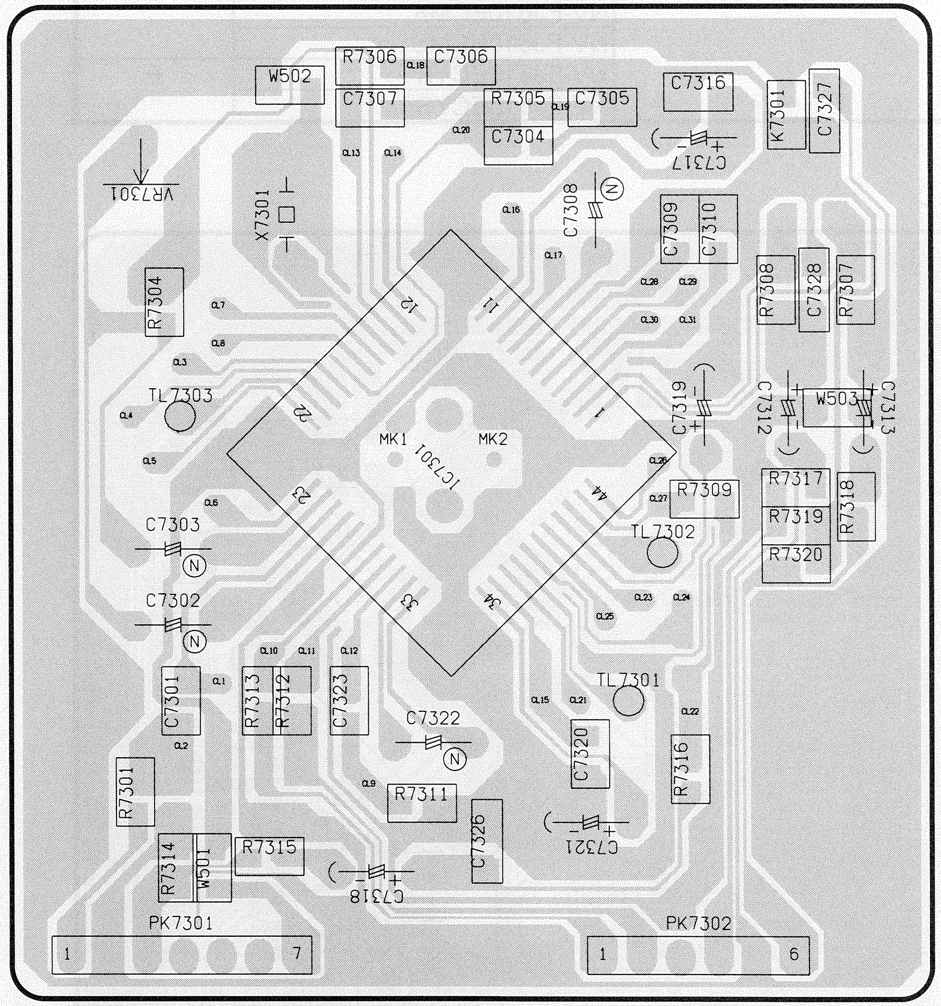
8.4. TV DEMODULATOR PACK C.B.A.

PART NO.	MODEL NO.	MARK
VEP07A23A	NV-FJ603EL-K	G
	NV-FJ603EP-K	H
	NV-FJ604EG-K	A
	NV-FJ606EG-K	
	NV-FJ610EG-K	
	NV-FJ610EG-S	
	NV-FJ604ECMK	D
	NV-FJ606EC-K	
	NV-FJ606ECMK	
	NV-FJ610EC-K	
	NV-FJ610EC-S	
	NV-FJ610ECMK	
	NV-FJ610ECMS	
VEP07A23B	NV-FJ606B-K	C
	NV-FJ610B-K	
	NV-FJ610B-S	
	NV-FJ610BL-K	F
VEP07A31C	NV-FJ603EPYK	J
	NV-FJ606EGYK	B
	NV-FJ610EGYK	
	NV-FJ610EGYS	
	NV-FJ610ECYK	E
	NV-FJ610ECYS	


VR0701
R0707
L0703
D0702
R0705
C0716
C0703
W511
R0708
IC0701
24
1
12
13
C0710
W504
5
6
W508
W509
W510
C0702
C0701
C0719
R0746
C0706
C0724
R0726
R0713
R0727
R0745
C0707
X0704
8
K0703
1
10
C0704
(A,B,D,E,G,H,J)
C0714
C0717
R0730
R0701
(C,F)
T0701
R0717
R0711
W517
C0708
K0709
L0701
4
R0715
W507
K0707
C0715
R0728
W516
R0719
C0713
W513
W512
C0721
PP0701
X0701
X0702
W514
R0740
C0712
W506
R0742
R0729
C0711
W501
W502
W503
R0725
R0741
W515
PK0701
R0743
Q0702
1
9

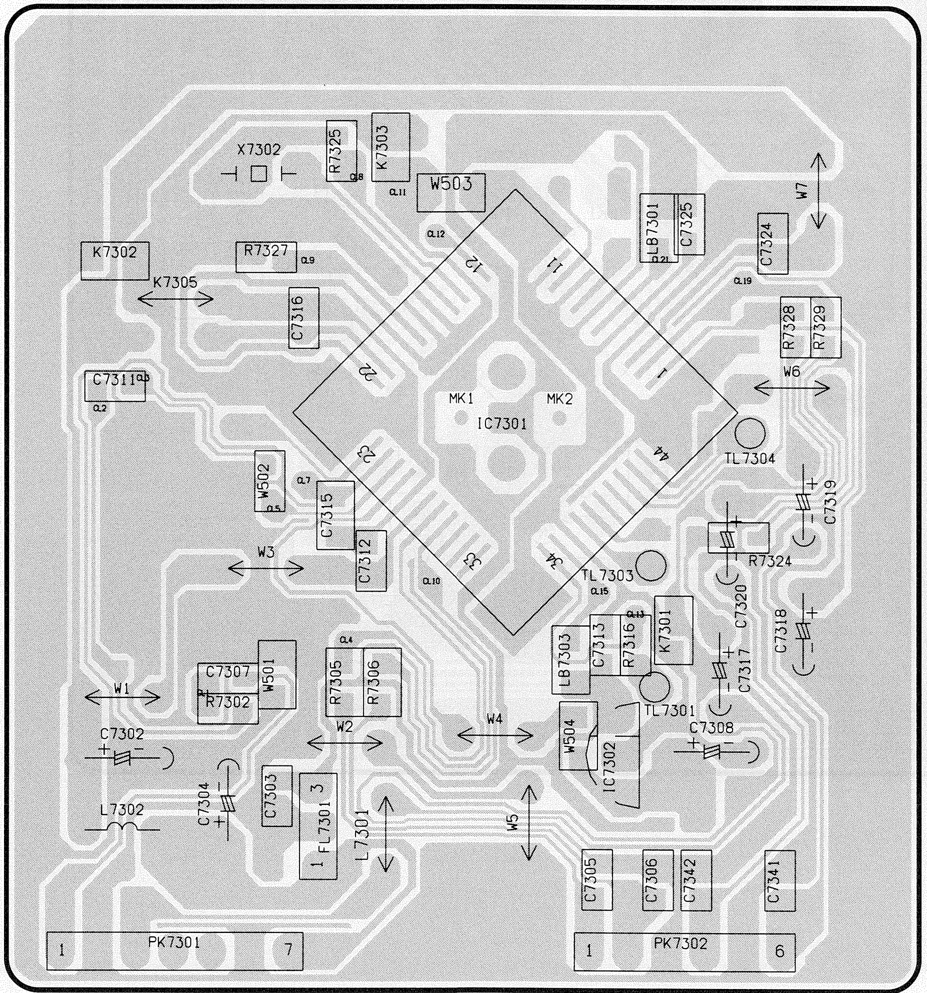
8.5. DECODER PACK C.B.A.

PART NO.	MODEL NO.	MARK
VEP07A16A	NV-FJ603EL-K	G
	NV-FJ604EG-K	A
	NV-FJ606EG-K	
	NV-FJ610EG-K	
	NV-FJ610EG-S	
	NV-FJ606EGYK	B
	NV-FJ610EGYK	
	NV-FJ610EGYS	


W502
R7306
C7306
C7307
R7305
C7305
C7304
C7316
K7301
C7327
C7317
VR7301
X7301
C7308
C7309
C7310
R7304
R7308
C7328
R7307
TL7303
IC7301
MK1
MK2
12
11
22
1
23
44
33
34
C7319
C7312
W503
C7313
R7309
R7317
R7319
R7318
R7320
TL7302
C7303
C7302
C7301
R7313
R7312
C7323
C7322
TL7301
R7301
R7311
C7320
R7316
C7321
R7314
W501
R7315
C7325
C7318
PK7301
PK7302
1
7
1
6

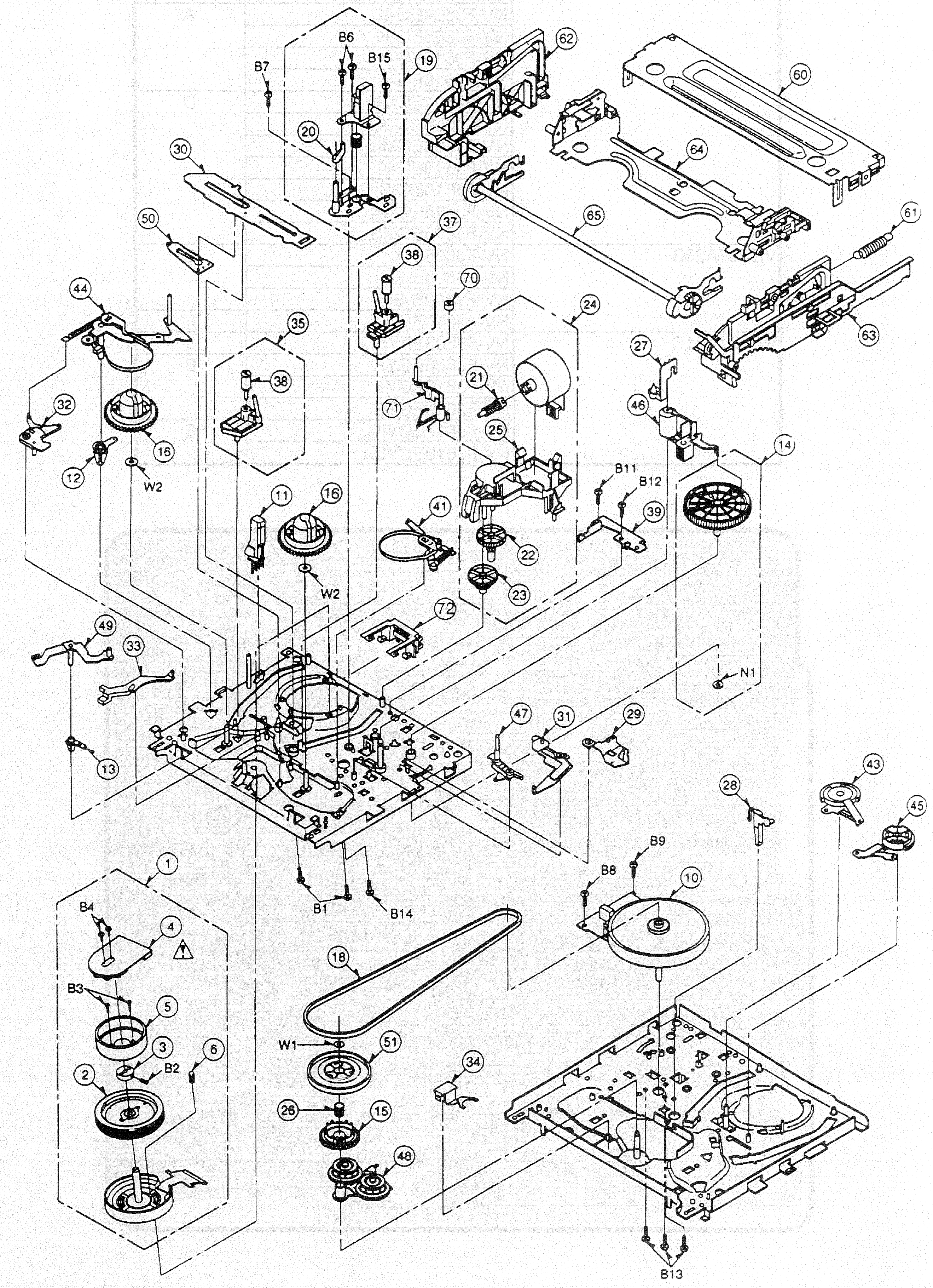
8.6. NICAM DECODER PACK C.B.A.

PART NO.	MODEL NO.	MARK
VEP07A18A	NV-FJ606B-K	C
	NV-FJ610B-S	
	NV-FJ610B-K	
	NV-FJ610BL-K	F
VEP07A18B	NV-FJ603EP-K	H
	NV-FJ603EPYK	J
	NV-FJ604ECMK	D
	NV-FJ606EC-K	
	NV-FJ606ECMK	
	NV-FJ610EC-K	
	NV-FJ610EC-S	
	NV-FJ610ECMK	
	NV-FJ610ECMS	
	NV-FJ610ECYK	E
	NV-FJ610ECYS	


X7302
R7325
K7303
W503
LB7301
C7325
C7324
W7
K7302
R7327
K7305
C7316
R7328
R7329
C7311
W6
MK1
MK2
IC7301
TL7304
W502
C7315
C7312
W3
C7319
R7324
TL7303
C7320
C7318
C7307
W501
R7302
R7305
R7306
LB7303
C7313
R7316
K7301
C7317
W1
C7302
W2
W4
W504
IC7302
TL7301
C7308
L7302
C7304
C7303
FL7301
L7301
W5
C7305
C7306
C7342
C7341
PK7301
PK7302

9 EXPLODED VIEWS & MECHANICAL REPLACEMENT PARTS LIST

9.1. CHASSIS PARTS SECTION


B6
B7
B15
19
62
60
20
30
64
65
61
50
37
38
70
24
44
35
38
63
21
27
71
46
14
32
16
25
12
W2
11
16
41
B11
B12
39
22
23
W2
72
49
33
N1
47
31
29
13
28
43
45
B9
B8
10
1
B1
B14
B4
4
18
B3
5
3
6
B2
W1
51
34
2
26
15
48
B13

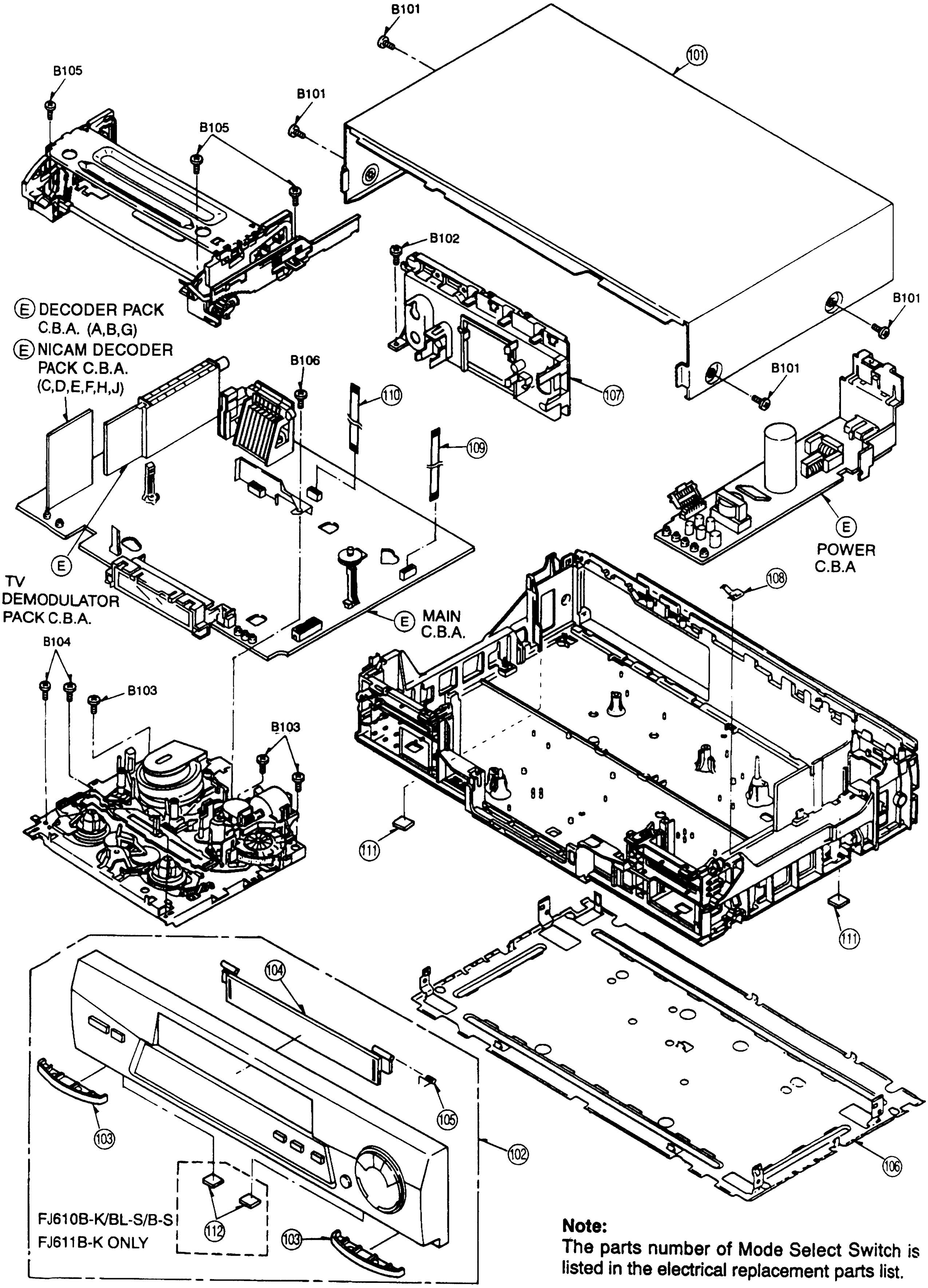
Note: 1.* Be sure to make your orders of replacement parts according to this list.

2. IMPORTANT SAFETY NOTICE
Components identified with the mark < ! > have the special characteristics for safety.
When replacing any of these components, use only the same type.

Ref. No.	Part No.	Part Name & Description	Pcs	Remarks
1 (1)	VEG1535	CYLINDER UNIT	1	[SUPPLIED FROM MBV]
2 (1)	VEH0844	UPPER CYLINDER UNIT	1	[SUPPLIED FROM MBV]
3 (1)	VDB1256	CYLINDER RETAINER	1	
⚠ 4 (1)	VEM0715	CYLINDER MOTOR UNIT	1	[SUPPLIED FROM MBV]
6 (1)	VXS0135	EARTH BRUSH UNIT	1	
10 (1)	VEK8841	CAPSTAN UNIT	1	[SUPPLIED FROM MBV]
11 (1)	VBS0155	FE HEAD	1	
12 (1)	VDB1431	TENSION ARM BOSS	1	
13 (1)	VDB1460	SUPPLY BRAKE ARM BOSS	1	
14 (1)	VDG1220KIT	MAIN CAM GEAR	1	
15 (1)	VDG1221	CONVERSION GEAR	1	
16 (1)	VDR0350	SUPPLY/TAKE-UP REEL TABLE	2	
18 (1)	VDV0382	CAPSTAN BELT	1	[SUPPLIED FROM MBV]
19 (1)	VED0412	A/C HEAD UNIT	1	
20 (1)	VMX2656	P4 CAP	1	
21 (1)	VDG1217	WORM GEAR	1	
22 (1)	VDG1218	WORM WHEEL GEAR	1	
23 (1)	VDG1219	CENTRE GEAR	1	
24 (1)	VEM0604	LOADING MOTOR UNIT	1	[SUPPLIED FROM MBV]
25 (1)	VMD2619	MOTOR BRACKET	1	
26 (1)	VMB3045	CONVERSION GEAR SPRING	1	
27 (1)	VMD2620	OPENER PIECE	1	
28 (1)	VMD2738	LED PRISM	1	
29 (1)	VML3165	DRIVE RACK ARM	1	[SUPPLIED FROM MBV]
30 (1)	VML3166	MAIN LEVER	1	[SUPPLIED FROM MBV]
31 (1)	VML3167	DRIVE MAIN LEVER ARM	1	[SUPPLIED FROM MBV]
32 (1)	VML3172	SUPPLY SPRING ARM	1	[SUPPLIED FROM MBV]
33 (1)	VML3176	CONVERSION LEVER A	1	[SUPPLIED FROM MBV]
34 (1)	VML3177	CONVERSION LEVER B	1	[SUPPLIED FROM MBV]
35 (1)	VXA6040	INCLINED BASE (S) UNIT	1	
37 (1)	VXA5854	INCLINED BASE (T) UNIT	1	
38 (1)	VXP1840	ROLLER POST	2	
39 (1)	VMA9672	SUPPORT ANGLE	1	
41 (1)	VXL2667	TAKE UP BRAKE ARM UNIT	1	
43 (1)	VXL2670	TAKE UP LOADING ARM UNIT	1	
44 (1)	VXL2798	TENSION ARM UNIT	1	[SUPPLIED FROM MBV]
45 (1)	VXL2672	SUPPLY LOADING ARM UNIT	1	
46 (1)	VXL2785	PINCH ARM UNIT	1	[SUPPLIED FROM MBV]
47 (1)	VXL2996	P5 ARM UNIT	1	[SUPPLIED FROM MBV]
48 (1)	VXL2792	IDLER ARM UNIT	1	[SUPPLIED FROM MBV]
49 (1)	VXL2733	SUPPLY BRAKE ARM UNIT	1	
50 (1)	VXL2747	LOADING RACK UNIT	1	
51 (1)	VXP2035	CENTRE CLUTCH UNIT	1	
60 (1)	VMA9516	TOP PLATE	1	
61 (1)	VMB3047	CONNECTION SPRING	1	
62 (1)	VMD3379	SIDE PLATE (L)	1	[SUPPLIED FROM MBV]
63 (1)	VXA6607	SIDE PLATE (R) UNIT	1	
64 (1)	VXA5746	CASSETTE HOLDER UNIT	1	
65 (1)	VXP1730	MAIN SHAFT UNIT	1	
70 (1)	VDP1668	CLEANER ROLLER	1	[SUPPLIED FROM MBV]
71 (1)	VML3164	CLEANER ARM	1	[SUPPLIED FROM MBV]
72 (1)	VMD3795	FPC HOLDER	1	[SUPPLIED FROM MBV]

Ref. No.	Part No.	Part Name & Description	Pcs	Remarks
B1 (1)	VHD1117	SCREW	2	
B2 (1)	VHD0842	SCREW	1	
B3 (1)	VHD0843	SCREW	2	
B4 (1)	VHD0844	SCREW	2	
B5 (1)	XYN26+C5	SCREW	1	
B6 (1)	VHD1066	SCREW	2	
B7 (1)	VHD1044	SCREW	1	
B8 (1)	VHD1060	SCREW	1	
B9 (1)	VHD1071	SCREW	1	
B11 (1)	XTS26+6F	SCREW	1	
B12 (1)	XTN26+6F	SCREW	1	
B13 (1)	XTN26+7J	SCREW	3	
B14 (1)	VHD1095	SCREW	1	
B15 (1)	VHD1185	SCREW	1	
N1 (1)	VHN0311	PUSH NUT	1	
W1 (1)	VMX2208	WASHER	1	[SUPPLIED FROM MBV]
W2 (1)	VMX2650	WASHER	2	

9.2. CASING PARTS SECTION


B101
101
B105
B101
B105
B102
B101
B101
Ⓔ DECODER PACK
C.B.A. (A,B,G)
Ⓔ NICAM DECODER
PACK C.B.A.
(C,D,E,F,H,J)
B106
110
107
109
Ⓔ
POWER
C.B.A
108
Ⓔ
TV
DEMODULATOR
PACK C.B.A.
Ⓔ MAIN
C.B.A.
B104
B103
B103
111
111
104
103
105
102
106
FJ610B-K/BL-S/B-S
FJ611B-K ONLY
112
103

Note:
The parts number of Mode Select Switch is listed in the electrical replacement parts list.

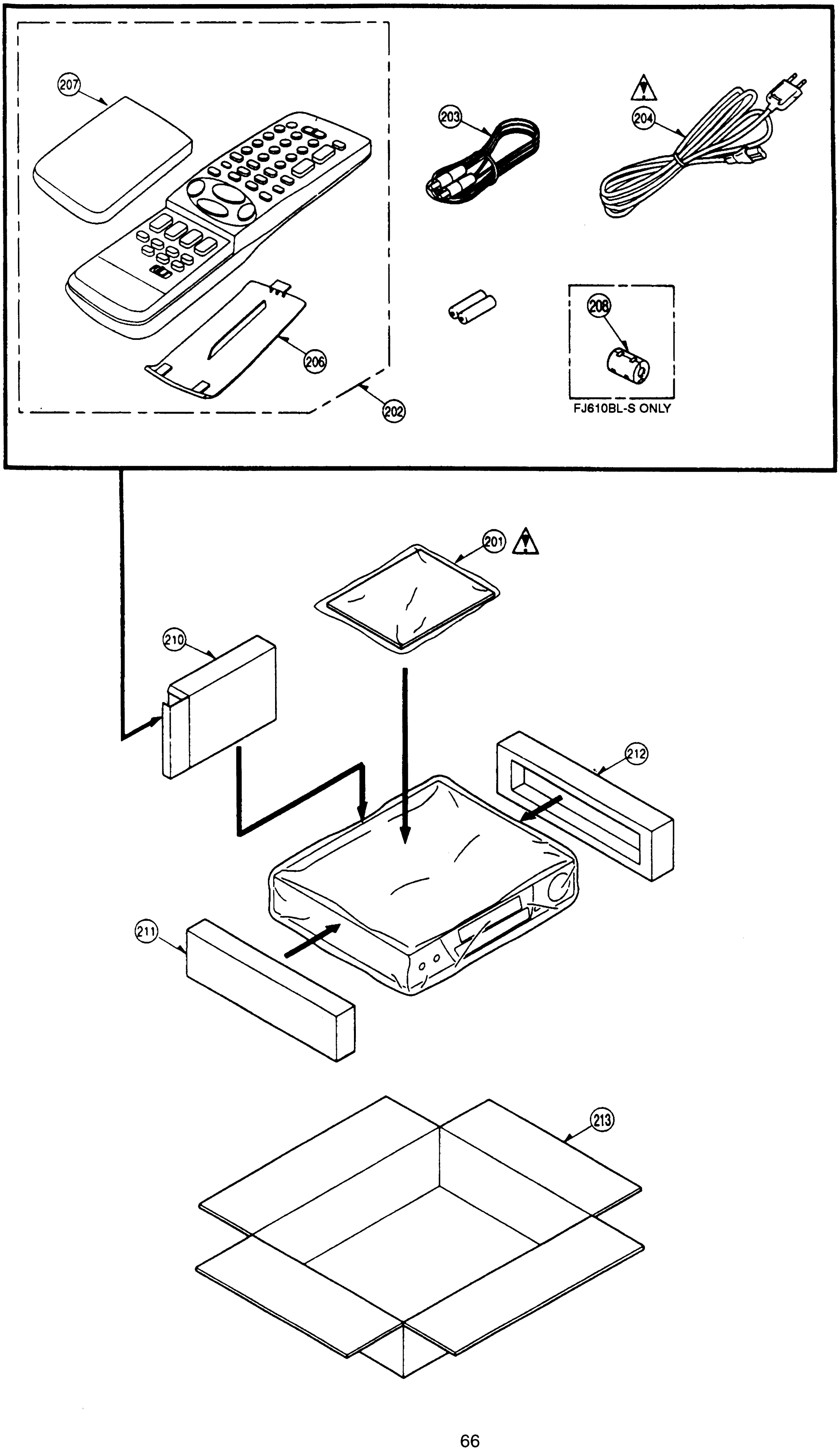
Note: 1.* Be sure to make your orders of replacement parts according to this list.

2. IMPORTANT SAFETY NOTICE
Components identified with the mark < ! > have the special characteristics for safety.
When replacing any of these components, use only the same type.

Ref.No.	Part No.	Part Name & Description	Pcs	Remarks
101 (2)	VGM1466	TOP PANEL	1	[SUPPLIED FROM MBV]
				NV-FJ610EG-K/EGYK/B-K
				NV-FJ610ECMK/EC-K/ECYK
				NV-FJ611B-K
				NV-FJ606EG-K/EGYK
				NV-FJ606ECMK/EC-K
				NV-FJ603EPYK/EL-K/EP-K
				NV-FJ604EG-K/ECMK
101 (2)	VGM1556	TOP PANEL	1	[SUPPLIED FROM MBV]
				NV-FJ610EG-S/EGYS/B-S
				NV-FJ610ECMS/EC-S/ECYS
				NV-FJ610BL-S
102 (2)	VYP7537	FRONT PANEL UNIT	1	[SUPPLIED FROM MBV]
				NV-FJ610EG-K/EGYK
102 (2)	VYP7536	FRONT PANEL UNIT	1	[SUPPLIED FROM MBV]
				NV-FJ610EG-S/EGYS
102 (2)	VYP7541	FRONT PANEL UNIT	1	[SUPPLIED FROM MBV]
				NV-FJ610B-K
102 (2)	VYP7540	FRONT PANEL UNIT	1	[SUPPLIED FROM MBV]
				NV-FJ610B-S/BL-S
102 (2)	VYP7539	FRONT PANEL UNIT	1	[SUPPLIED FROM MBV]
				NV-FJ610ECMK/EC-K/ECYK
102 (2)	VYP7538	FRONT PANEL UNIT	1	[SUPPLIED FROM MBV]
				NV-FJ610ECMS/EC-S/ECYS
102 (2)	VYP7545	FRONT PANEL UNIT	1	[SUPPLIED FROM MBV]
				NV-FJ606EG-K/EGYK
102 (2)	VYP7547	FRONT PANEL UNIT	1	[SUPPLIED FROM MBV]
				NV-FJ603EPYK/EP-K
102 (2)	VYP7562	FRONT PANEL UNIT	1	[SUPPLIED FROM MBV]
				NV-FJ606ECMK/EC-K
102 (2)	VYP7546	FRONT PANEL UNIT	1	[SUPPLIED FROM MBV]
				NV-FJ603EL-K
102 (2)	VYP7548	FRONT PANEL UNIT	1	[SUPPLIED FROM MBV]
				NV-FJ611B-K
102 (2)	VYP7550	FRONT PANEL UNIT	1	[SUPPLIED FROM MBV]
				NV-FJ604EG-K/ECMK
103 (2)	VKA0191	LEG (LEFT & RIGHT)	1	[SUPPLIED FROM MBV]
104 (2)	VKF3037	BLINDER PANEL	1	[SUPPLIED FROM MBV]
105 (2)	VMB2521	BLINDER SPRING	1	
106 (2)	VKU0519	BOTTOM PLATE	1	
107 (2)	VJH1024	JACK BOARD	1	[SUPPLIED FROM MBV]
108 (2)	VMC1065	EARTH SPRING	1	
109 (2)	VWJ1281	FLAT CARD CABLE (9P)	1	[SUPPLIED FROM MBV]
				MAIN-A/C FPC
110 (2)	VWJ1282	FLAT CARD CABLE (6P)	1	[SUPPLIED FROM MBV]
				MAIN-UDD FPC
111 (2)	RKA0072	FOOT(RUBBER)	2	[SUPPLIED FROM MBV]
112 (2)	RKA0072	FOOT(RUBBER)	2	NV-FJ610B-K/B-S/BL-S
				NV-FJ611B-K
B101(2)	XTW3+10TFZ	SCREW	4	NV-FJ610EG-K/EGYK/B-K
				NV-FJ610ECMK/EC-K/ECYK
				NV-FJ606EG-K/EGYK/ECMK
				NV-FJ606EC-K
				NV-FJ603EPYK/EL-K/EP-K
				NV-FJ604EG-K/ECMK
				NV-FJ611B-K
B101(2)	XTW3+10TFC	SCREW	4	NV-FJ610EG-S/EGYS/B-S
				NV-FJ610ECMS/EC-S
				NV-FJ610ECYS/BL-S
B102(2)	VHD0773	SCREW	1	
B103(2)	VHD1065	SCREW	3	
B104(2)	VHD0168	SCREW	2	
B105(2)	XTV26+8FR	SCREW	3	
B106(2)	XTV26+6FR	SCREW	1	

Ref.No.	Part No.	Part Name & Description	Pcs	Remarks

9.2. PACKING PARTS SECTION


207
203
204
206
202
208
FJ610BL-S ONLY
201
210
212
211
213

Note: 1.* Be sure to make your orders of replacement parts according to this list.

2. IMPORTANT SAFETY NOTICE
Components identified with the mark < ! > have the special characteristics for safety.
When replacing any of these components, use only the same type.

Ref.No.	Part No.	Part Name & Description	Pcs	Remarks
⚠ 201 (3)	VQT8539	OPERATING INSTRUCTIONS	1	[SUPPLIED FROM MBV]
		(ENGLISH)		NV-FJ610EGYK/EGYS
				NV-FJ610ECYK/ECYS
				NV-FJ606EGYK
⚠ 201 (3)	VQT8540	OPERATING INSTRUCTIONS	1	[SUPPLIED FROM MBV]
		(GERMAN)		NV-FJ610EG-K/EG-S/EGYK
				NV-FJ610EGYS/ECMK/ECMS
				NV-FJ606EG-K/EGYK/ECMK
				NV-FJ604EG-K/ECMK
⚠ 201 (3)	VQT8541	OPERATING INSTRUCTIONS	1	[SUPPLIED FROM MBV]
		(FRENCH)		NV-FJ610EGYK/EGYS/ECMK
				NV-FJ610ECMS/EG-S/EG-K
				NV-FJ606EGYK/ECMK
				NV-FJ604ECMK
⚠ 201 (3)	VQT8542	OPERATING INSTRUCTIONS	1	[SUPPLIED FROM MBV]
		(SPANISH)		NV-FJ610EC-S/EC-K
⚠ 201 (3)	VQT8543	OPERATING INSTRUCTIONS	1	[SUPPLIED FROM MBV]
		(ITALIAN)		NV-FJ610EGYK/EGYS
				NV-FJ610EG-S/EG-K
				NV-FJ606EGYK
⚠ 201 (3)	VQT8544	OPERATING INSTRUCTIONS	1	[SUPPLIED FROM MBV]
		(DUTCH)		NV-FJ610ECMK/ECMS
				NV-FJ610EG-S/EG-K
				NV-FJ606ECMK/EG-K
				NV-FJ604ECMK
⚠ 201 (3)	VQT8545	OPERATING INSTRUCTIONS	1	[SUPPLIED FROM MBV]
		(SWEDISH)		NV-FJ610ECYK/ECYS
				NV-FJ610ECMK/ECMS
				NV-FJ606ECMK
⚠ 201 (3)	VQT8546	OPERATING INSTRUCTIONS	1	[SUPPLIED FROM MBV]
		(DANISH)		NV-FJ610ECMK/ECMS
				NV-FJ606ECMK
				NV-FJ604ECMK
⚠ 201 (3)	VQT8547	OPERATING INSTRUCTIONS	1	[SUPPLIED FROM MBV]
		(FINNISH)		NV-FJ610EC-S/EC-K
				NV-FJ606EC-K
⚠ 201 (3)	VQT8548	OPERATING INSTRUCTIONS	1	[SUPPLIED FROM MBV]
		(PORTUGUESE)		NV-FJ610EC-K/EC-S
⚠ 201 (3)	VQT8549	OPERATING INSTRUCTIONS	1	[SUPPLIED FROM MBV]
		(GREEK)		NV-FJ610EG-S/EG-K
⚠ 201 (3)	VQT8550	OPERATING INSTRUCTIONS	1	[SUPPLIED FROM MBV]
		(ENGLISH)		NV-FJ611B-K
⚠ 201 (3)	VQT8552	OPERATING INSTRUCTIONS	1	[SUPPLIED FROM MBV]
		(ENGLISH)		NV-FJ603EPYK
⚠ 201 (3)	VQT8553	OPERATING INSTRUCTIONS	1	[SUPPLIED FROM MBV]
		(GERMAN)		NV-FJ603EL-K/EP-K
⚠ 201 (3)	VQT8554	OPERATING INSTRUCTIONS	1	[SUPPLIED FROM MBV]
		(FRENCH)		NV-FJ603EL-K/EP-K
⚠ 201 (3)	VQT8555	OPERATING INSTRUCTIONS	1	[SUPPLIED FROM MBV]
		(SPANISH)		NV-FJ603EP-K
⚠ 201 (3)	VQT8556	OPERATING INSTRUCTIONS	1	[SUPPLIED FROM MBV]
		(ITALIAN)		NV-FJ603EL-K
⚠ 201 (3)	VQT8557	OPERATING INSTRUCTIONS	1	[SUPPLIED FROM MBV]
		(SWEDISH)		NV-FJ603EPYK
⚠ 201 (3)	VQT8558	OPERATING INSTRUCTIONS	1	[SUPPLIED FROM MBV]
		(GREEK)		NV-FJ603EL-K
⚠ 201 (3)	VQT8559	OPERATING INSTRUCTIONS	1	[SUPPLIED FROM MBV]
		(ENGLISH)		NV-FJ610B-K/B-S/BL-S
⚠ 201 (3)	VQT8794	OPERATING INSTRUCTIONS	1	[SUPPLIED FROM MBV]
		(DUTCH)		NV-FJ603EL-K/EP-K
⚠ 201 (3)	VQT8795	OPERATING INSTRUCTIONS	1	[SUPPLIED FROM MBV]
		(DANISH)		NV-FJ603EP-K
⚠ 201 (3)	VQT8796	OPERATING INSTRUCTIONS	1	[SUPPLIED FROM MBV]
		(PORTUGUESE)		NV-FJ603EP-K

Ref.No.	Part No.	Part Name & Description	Pcs	Remarks
202 (3)	EUR571739	REMOTE CONTROLLER	1	[SUPPLIED FROM MBV]
				NV-FJ610EG-K/EG-S/EGYS
				NV-FJ610EGYK/ECMK/ECMS
				NV-FJ610EC-K/EC-S
				NV-FJ610ECYK/ECYS
				NV-FJ606EG-K/EGYK
				NV-FJ606ECMK/EC-K
				NV-FJ604EG-K/ECMK
202 (3)	EUR571744	REMOTE CONTROLLER	1	[SUPPLIED FROM MBV]
				NV-FJ610B-K/B-S/BL-S
202 (3)	EUR571745	REMOTE CONTROLLER	1	[SUPPLIED FROM MBV]
				NV-FJ603EL-K/EP-K/EPYK
202 (3)	EUR571752	REMOTE CONTROLLER	1	[SUPPLIED FROM MBV]
				NV-FJ611B-K
203 (3)	VJA0728	RF COAXIAL CABLE	1	[SUPPLIED FROM MBV]
⚠ 204 (3)	VJA1059	AC CORD	1	[SUPPLIED FROM MBV]
				NV-FJ610EG-K/EG-S/EGYS
				NV-FJ610EGYK/ECMK/ECMS
				NV-FJ610EC-K/EC-S
				NV-FJ610ECYK/ECYS
				NV-FJ606EG-K/EGYK
				NV-FJ606ECMK/EC-K
				NV-FJ603EPYK/EL-K/EP-K
				NV-FJ604EG-K/ECMK
⚠ 204 (3)	VJA1022	AC CORD	1	[SUPPLIED FROM MBV]
				NV-FJ610B-K/B-S/BL-S
				NV-FJ611B-K
206 (3)	UR57EC679F	BATTERY COVER	1	[SUPPLIED FROM MBV]
207 (3)	UR57CV680C	DOOR PANEL	1	[SUPPLIED FROM MBV]
208 (3)	VLF1321	FERRITE CORE	1	NV-FJ610BL-S
210 (3)	VPK2246	ACCESSORIES PACKING	1	[SUPPLIED FROM MBV]
211 (3)	VPN5340	CUSHION (L)	1	[SUPPLIED FROM MBV]
212 (3)	VPN5341	CUSHION (R)	1	[SUPPLIED FROM MBV]
213 (3)	VPG0C84	PACKING CASE	1	[SUPPLIED FROM MBV]
				NV-FJ611B-K
213 (3)	VPG0C83	PACKING CASE	1	[SUPPLIED FROM MBV]
				NV-FJ610EG-K/EGYK/B-K
				NV-FJ610ECMK/EC-K/ECYK
213 (3)	VPG0C82	PACKING CASE	1	[SUPPLIED FROM MBV]
				NV-FJ610EG-S/EGYS/B-S
				NV-FJ610ECMS/EC-S
				NV-FJ610ECYS/BL-S
213 (3)	VPG0C85	PACKING CASE	1	[SUPPLIED FROM MBV]
				NV-FJ606EG-K/EGYK
				NV-FJ606ECMK/EC-K
				NV-FJ603EPYK/EL-K/EP-K
				NV-FJ604EG-K/ECMK
		SERVICE FIXTURES & TOOLS		
	VFJ8125H3F	VHS ALIGNMENT TAPE (PAL)	1	
	VFK0335	RETAINING RING REMOVER	1	
		(3mm/4mm)		
	VFK0329	POST ADJUSTMENT SCREWDRIVER	1	
	VFK0326	HEX WRENCH SET	1	
	VFK0132	BACK TENSION METER	1	
	VFK27	HEAD CLEANING STICK	1	
	VFK1024	MOLYTONE GREASE	1	
	VFK0330	FINE ADJUSTMENT GEAR DRIVER	1	
	VFK2744	16P EXTENSION CABLE	1	MAIN - POWER
	VFK1301	SILICONE GREASE	1	

10 ELECTRICAL REPLACEMENT PARTS LIST

Note: 1. Be sure to make your orders of replacement parts according to this list.
2. IMPORTANT SAFETY NOTICE : Components identified with the mark < ! > have the special characteristics for safety. When replacing any of these components, use only the same type.
3. Unless otherwise specified, All resistors are in OHMS , K=1,000 OHMS. All capacitors are in MICRO-FARADS(uf) , P=uuF.
4. The P.C.Board units marked width"■"show below the main assembled parts.
5. The marking(RTL) indicates the retention time is limited for this item. After the discontinuation of this assembly in production, it will no longer be available.

Ref.No.	Part No.	Part Name & Description	Pcs	Remarks
------- MAIN C.B.A. -------				
■	VEP06D25A	MAIN C.B.A.	1	[SUPPLIED FROM MBV]
		(Page:69)		(RTL)
				NV-FJ610EG-S/EG-K
				NV-FJ606EG-K
				NV-FJ603EL-K
				NV-FJ604EG-K
				THE FOLLOWING C.B.A.S ARE
				INCLUDED IN MAIN C.B.A.
				VEP07A16A (DECODER)
				VEP07A23A (TV DEMODU.)
■	VEP06D25B	MAIN C.B.A.	1	[SUPPLIED FROM MBV]
		(Page:73)		(RTL)
				NV-FJ610B-S/B-K
				NV-FJ611B-K
				THE FOLLOWING C.B.A.S ARE
				INCLUDED IN MAIN C.B.A.
				VEP07A18A (NICAM)
				VEP07A23B (TV DEMODU.)
■	VEP06D25C	MAIN C.B.A.	1	[SUPPLIED FROM MBV]
		(Page:78)		(RTL)
				NV-FJ610BL-S
				THE FOLLOWING C.B.A.S ARE
				INCLUDED IN MAIN C.B.A.
				VEP07A18A (NICAM)
				VEP07A23B (TV DEMODU.)
■	VEP06D25D	MAIN C.B.A.	1	[SUPPLIED FROM MBV]
		(Page:82)		(RTL)
				NV-FJ610EC-S/ECMS
				NV-FJ610EC-K/ECMK
				NV-FJ603EP-K
				NV-FJ606EC-K/ECMK
				NV-FJ604ECMK
				THE FOLLOWING C.B.A.S ARE
				INCLUDED IN MAIN C.B.A.
				VEP07A18B (NICAM)
				VEP07A23A (TV DEMODU.)
■	VEP06D57A	MAIN C.B.A.	1	[SUPPLIED FROM MBV]
		(Page:87)		(RTL)
				NV-FJ610EGYS/EGYK
				NV-FJ606EGYK
				THE FOLLOWING C.B.A.S ARE
				INCLUDED IN MAIN C.B.A.
				VEP07A16A (DECODER)
				VEP07A31C (TV DEMODU.)
■	VEP06D57B	MAIN C.B.A.	1	[SUPPLIED FROM MBV]
		(Page:92)		(RTL)
				NV-FJ610ECYS/ECYK
				NV-FJ603EPYK
				THE FOLLOWING C.B.A.S ARE
				INCLUDED IN MAIN C.B.A.
				VEP07A18B (NICAM)
				VEP07A31C (TV DEMODU.)
------- DECODER PACK C.B.A. -------				
■	VEP07A16A	DECODER PACK C.B.A.	1	[SUPPLIED FROM MBV]
				(RTL)
				INCLUDED IN MAIN C.B.A.
				(VEP06D25A, VEP06D57A).
------- NICAM DECODER PACK C.B.A. -------				
■	VEP07A18A	NICAM DECODER PACK C.B.A.	1	[SUPPLIED FROM MBV]
				(RTL)
				INCLUDED IN MAIN C.B.A.
				(VEP06D25B/C).
■	VEP07A18B	NICAM DECODER PACK C.B.A.	1	[SUPPLIED FROM MBV]
				(RTL)
				INCLUDED IN MAIN C.B.A.
				(VEP06D25D, VEP06D57B).
------- TV DEMODULATOR PACK C.B.A. -------				
■	VEP07A23A	TV DEMODULATOR PACK C.B.A	1	[SUPPLIED FROM MBV]
				(RTL)
				INCLUDED IN MAIN C.B.A.
				(VEP06D25A/D).
■	VEP07A23B	TV DEMODULATOR PACK C.B.A	1	[SUPPLIED FROM MBV]
				(RTL)
				INCLUDED IN MAIN C.B.A.
				(VEP06D25B/C).
■	VEP07A31C	TV DEMODULATOR PACK C.B.A	1	[SUPPLIED FROM MBV]
				(RTL)
				INCLUDED IN MAIN C.B.A.
				(VEP06D57A/B).
------- POWER C.B.A. -------				
⚠ ■	VEP01826T	POWER C.B.A.	1	[SUPPLIED FROM MBV]
		(Page:96)		(RTL)
------- CYLINDER STATOR C.B.A. -------				
■	------------	CYLINDER STATOR C.B.A.	1	INCLUDED IN
		(Page:97)		CYLINDER STATOR UNIT
				(VEK8840).
------- CAPSTAN DRIVE C.B.A. -------				
■	------------	CAPSTAN DRIVE C.B.A.	1	INCLIDEDE IN
				CAPSTAN UNIT (VEK8841).
⚠ TU7601	ENG47307G1	TUNER	1	[SUPPLIED FROM MBV]
				NV-FJ610EG-S/EG-K
				NV-FJ610EC-S/ECMS
				NV-FJ610EC-K/ECMK
				NV-FJ606EG-K/EC-K/ECMK
				NV-FJ604EG-K/ECMK
				NV-FJ603EL-K/EP-K
⚠ TU7601	ENG47308G1	TUNER	1	[SUPPLIED FROM MBV]
				NV-FJ610B-S/B-K
				NV-FJ611B-K
⚠ TU7601	ENG47309G1	TUNER	1	[SUPPLIED FROM MBV]
				NV-FJ610BL-S
⚠ TU7601	ENG47306G1	TUNER	1	[SUPPLIED FROM MBV]
				NV-FJ610EGYS/EGYK
				NV-FJ610ECYS/ECYK
				NV-FJ606EGYK
				NV-FJ603EPYK
⚠ F1101	XBA2C16TH15	FUSE	1	[SUPPLIED FROM MBV]

Ref. No.	Part No.	Part Name & Description	Pcs	Remarks
■	VEP06D25A	MAIN C. B. A.		[SUPPLIED FROM MBV]
				(RTL) NV-FJ610EG-S/EG-K
				NV-FJ606EG-K
				NV-FJ603EL-K
				NV-FJ604EG-K
C0701	ECUM1C105ZFN	C. CAPACITOR CH 16V 1U	1	
C0702	ECUX1H102KBV	C. CAPACITOR CH 50V 1000P	1	
C0703	ECUM1A105KBN	C. CAPACITOR CH 10V 1U	1	
C0704	ECUM1E333KBN	C. CAPACITOR CH 25V 0. 033U	1	
C0706	ECEA1HKA010	E. CAPACITOR 50V 1U	1	
C0707	ECEA1HKA2R2	E. CAPACITOR 50V 2. 2U	1	
C0708	ECEA1HKAR47	E. CAPACITOR 50V 0. 47U	1	
C0710	ECUX1H103ZFV	C. CAPACITOR CH 50V 0. 01U	1	
C0711	ECEA1CKA220	E. CAPACITOR 16V 22U	1	
C0712	ECUX1C104ZFV	C. CAPACITOR CH 16V 0. 1U	1	
C0713	EEUFA1A391	E. CAPACITOR 10V 390U	1	
C0714	ECUM1C105ZFN	C. CAPACITOR CH 16V 1U	1	
C0715	ECUX1H030CCV	C. CAPACITOR CH 50V 3P	1	
C0716	ECUX1H123KBV	C. CAPACITOR CH 50V 0. 012U	1	
C0717	ECUM1H330GUV	C. CAPACITOR CH 50V 33P	1	
C0719	ECUX1E104ZFV	C. CAPACITOR CH 25V 0. 1U	1	
C0721	ECUX1H181JCV	C. CAPACITOR CH 50V 180P	1	
C0724	ECUX1H221KBV	C. CAPACITOR CH 50V 220P	1	
C1001	ECEA1AKG220	E. CAPACITOR 10V 22U	1	[SUPPLIED FROM MBV]
C1002	ECUM1H103ZFN	C. CAPACITOR CH 50V 0. 01U	1	
C1003	ECEA1CGE470	E. CAPACITOR 16V 47U	1	
C1004	ECUM1H103ZFN	C. CAPACITOR CH 50V 0. 01U	1	
C1005	ECEA1AKA470	E. CAPACITOR 10V 47U	1	
C1006, 07	ECUM1H103ZFN	C. CAPACITOR CH 50V 0. 01U	2	
C1008	ECA1CAK470X	E. CAPACITOR 16V 47U	1	
C1009	ECEA0JKA470	E. CAPACITOR 6. 3V 47U	1	
C1010	ECEA1CGE470	E. CAPACITOR 16V 47U	1	
C1011, 12	ECEA1CKA100	E. CAPACITOR 16V 10U	2	
C1015	ECUM1H102KBN	C. CAPACITOR CH 50V 1000P	1	
C1016	ECA1CAK100X	E. CAPACITOR 16V 10U	1	
C1017	ECEA1HKA4R7	E. CAPACITOR 50V 4. 7U	1	
C1201	ECEA0JKA101	E. CAPACITOR 6. 3V 100U	1	
C1202	ECUM1H103ZFN	C. CAPACITOR CH 50V 0. 01U	1	
C1203	ECEA1AKA220	E. CAPACITOR 10V 22U	1	
C1204	ECUM1H103ZFN	C. CAPACITOR CH 50V 0. 01U	1	
C1205	ECEA0JKA470	E. CAPACITOR 6. 3V 47U	1	
C1206, 07	ECUM1E104KBN	C. CAPACITOR CH 25V 0. 1U	2	
C1208	ECUM1H103ZFN	C. CAPACITOR CH 50V 0. 01U	1	
C1501	ECUM1H221JCN	C. CAPACITOR CH 50V 220P	1	
C2501	ECUM1C474ZFN	C. CAPACITOR CH 16V 0. 47U	1	
C2502	ECEA1VKN4R7	E. CAPACITOR 35V 4. 7U	1	
C2503	ECUM1H563ZFN	C. CAPACITOR CH 50V 0. 056U	1	
C2504	ECEA1EKA470	E. CAPACITOR 25V 47U	1	
C2505	ECUM1H330JCN	C. CAPACITOR CH 50V 33P	1	
C2506	ECEA0JKN220	E. CAPACITOR 6. 3V 22U	1	
C2507	ECUM1H104ZFN	C. CAPACITOR CH 50V 0. 1U	1	
C2508	ECEA1EKA4R7	E. CAPACITOR 25V 4. 7U	1	
C2509, 10	ECUM1H563ZFN	C. CAPACITOR CH 50V 0. 056U	2	
C2511	ECEA1VKN4R7	E. CAPACITOR 35V 4. 7U	1	
C2512	ECUM1H392KBN	C. CAPACITOR CH 50V 3900P	1	
C2516	ECEA0JKA221	E. CAPACITOR 6. 3V 220U	1	
C2518	ECUM1H473ZFN	C. CAPACITOR CH 50V 0. 047U	1	
C2521	ECEA1EKA470	E. CAPACITOR 25V 47U	1	
C2522	ECUM1E683KBN	C. CAPACITOR CH 25V 0. 068U	1	
C2523-25	ECUM1C154KBN	C. CAPACITOR CH 16V 0. 15U	3	
C2526	ECEA1VKN4R7	E. CAPACITOR 35V 4. 7U	1	
C2535, 36	ECUM1H104ZFN	C. CAPACITOR CH 50V 0. 1U	2	
C3002, 03	ECUM1H102KBN	C. CAPACITOR CH 50V 1000P	2	
C3004	ECEA1HKA010	E. CAPACITOR 50V 1U	1	
C3005	ECUM1H680JCN	C. CAPACITOR CH 50V 68P	1	
C3006	ECUM1H060DCN	C. CAPACITOR CH 50V 6P	1	
C3007	ECUM1E104KBN	C. CAPACITOR CH 25V 0. 1U	1	
C3008	ECUM1H103ZFN	C. CAPACITOR CH 50V 0. 01U	1	
C3011	ECEA0JKA221	E. CAPACITOR 6. 3V 220U	1	
C3012, 13	ECUM1H104ZFN	C. CAPACITOR CH 50V 0. 1U	2	
C3014	ECUM1H103ZFN	C. CAPACITOR CH 50V 0. 01U	1	
C3015	ECEA1HKA010	E. CAPACITOR 50V 1U	1	
C3016	ECUM1H333KBN	C. CAPACITOR CH 50V 0. 033U	1	
C3017	ECUM1H104ZFN	C. CAPACITOR CH 50V 0. 1U	1	
C3018	ECEA0JKA101	E. CAPACITOR 6. 3V 100U	1	
C3019	ECUM1E104KBN	C. CAPACITOR CH 25V 0. 1U	1	
C3020	ECUM1H222KBN	C. CAPACITOR CH 50V 2200P	1	
C3021	ERJ6GMZ0R00	M. RESISTOR CH 1/10W 0	1	
C3024	ECEA0JKA470	E. CAPACITOR 6. 3V 47U	1	
C3025	ECEA0JKA101	E. CAPACITOR 6. 3V 100U	1	
C3026	ECUM1H104ZFN	C. CAPACITOR CH 50V 0. 1U	1	
C3029	ECUM1H103ZFN	C. CAPACITOR CH 50V 0. 01U	1	
C3030	ECUM1H222KBN	C. CAPACITOR CH 50V 2200P	1	
C3031	ECEA1HKAR47	E. CAPACITOR 50V 0. 47U	1	
C3033	ECEA1EKN4R7	E. CAPACITOR 25V 4. 7U	1	
C3034	ECEA1EKA4R7	E. CAPACITOR 25V 4. 7U	1	
C3035	ECUM1H104ZFN	C. CAPACITOR CH 50V 0. 1U	1	
C3036	ECEA0JKA221	E. CAPACITOR 6. 3V 220U	1	
C3037	ECUM1H104ZFN	C. CAPACITOR CH 50V 0. 1U	1	
C3038	ECEA0JKA101	E. CAPACITOR 6. 3V 100U	1	
C3039	ECEA0JKA220	E. CAPACITOR 6. 3V 22U	1	
C3040	ECUM1H223KBN	C. CAPACITOR CH 50V 0. 022U	1	
C3041	ECEA1CKA100	E. CAPACITOR 16V 10U	1	
C3042	ECUM1H560JCN	C. CAPACITOR CH 50V 56P	1	
C3043	ECUM1H104ZFN	C. CAPACITOR CH 50V 0. 1U	1	
C3044	ECUM1H821JCN	C. CAPACITOR CH 50V 820P	1	
C3045	ECUM1H221JCN	C. CAPACITOR CH 50V 220P	1	
C3046	ECUM1H220JCN	C. CAPACITOR CH 50V 22P	1	
C3047	ECEA0JKA220	E. CAPACITOR 6. 3V 22U	1	
C3048	ECUM1H560JCN	C. CAPACITOR CH 50V 56P	1	
C3049	ECUM1H681JCN	C. CAPACITOR CH 50V 680P	1	
C3050	ECUM1H680JCN	C. CAPACITOR CH 50V 68P	1	
C3051	ECUM1H220JCN	C. CAPACITOR CH 50V 22P	1	
C3052, 53	ECUM1H104ZFN	C. CAPACITOR CH 50V 0. 1U	2	
C3054, 55	ECUM1E104KBN	C. CAPACITOR CH 25V 0. 1U	2	
C3502	ECUM1H103KBN	C. CAPACITOR CH 50V 0. 01U	1	
C3504	ECUM1H103KBN	C. CAPACITOR CH 50V 0. 01U	1	
C3505	ECEA0JKS470	E. CAPACITOR 6. 3V 47U	1	
C3506	ECUM1H103KBN	C. CAPACITOR CH 50V 0. 01U	1	
C3507-10	ECUM1E104KBN	C. CAPACITOR CH 25V 0. 1U	4	
C4001	ECEA1HKN010	E. CAPACITOR 50V 1U	1	
C4002	ECQB1H822JF	P. CAPACITOR 50V 8200P	1	
C4003	ECEA1HKA010	E. CAPACITOR 50V 1U	1	
C4004	ECEA1EKA4R7	E. CAPACITOR 25V 4. 7U	1	
C4005	ECUM1H272KBN	C. CAPACITOR CH 50V 2700P	1	
C4006	ECEA0JKA220	E. CAPACITOR 6. 3V 22U	1	
C4007	ECUM1H122JCN	C. CAPACITOR CH 50V 1200P	1	[SUPPLIED FROM MBV]
C4010, 11	ECUM1H153KBN	C. CAPACITOR CH 50V 0. 015U	2	
C4012	ECEA1HKA010	E. CAPACITOR 50V 1U	1	
C4013	ECEA0JKA470	E. CAPACITOR 6. 3V 47U	1	
C4014	ECEA1HKA0R1	E. CAPACITOR 50V 0. 1U	1	
C4015	ECEA0JKA220	E. CAPACITOR 6. 3V 22U	1	
C4016	ECEA1HKA0R1	E. CAPACITOR 50V 0. 1U	1	
C4018	ECUM1H104ZFN	C. CAPACITOR CH 50V 0. 1U	1	
C4019	ECEA0JKA470	E. CAPACITOR 6. 3V 47U	1	
C4045	ECUM1H103KBN	C. CAPACITOR CH 50V 0. 01U	1	
C4046-48	ECA1CAK100X	E. CAPACITOR 16V 10U	3	
C4068	ECQB1H223JF	P. CAPACITOR 50V 0. 022U	1	
C4070	ECUM1H221JCN	C. CAPACITOR CH 50V 220P	1	
C4072	ECEA0JKA221	E. CAPACITOR 6. 3V 220U	1	
C4073	ECUM1H223KBN	C. CAPACITOR CH 50V 0. 022U	1	
C4074	ECUM1H152JCN	C. CAPACITOR CH 50V 1500P	1	
C4075	ECEA1AKA220	E. CAPACITOR 10V 22U	1	
C4501, 02	ECEA1HKNR47	E. CAPACITOR 50V 0. 47U	2	
C4505-08	ECA1HAKR22X	E. CAPACITOR 50V 0. 22U	4	[SUPPLIED FROM MBV]
C4511, 12	ECEA1CKA100	E. CAPACITOR 16V 10U	2	
C4513-16	ECA1CAK100X	E. CAPACITOR 16V 10U	4	
C4517	ECEA1CKA100	E. CAPACITOR 16V 10U	1	
C4518	ECEA1HKAR22	E. CAPACITOR 50V 0. 22U	1	
C4519	ECA1CAK100X	E. CAPACITOR 16V 10U	1	
C4520	ECQB1H562JF	P. CAPACITOR 50V 5600P	1	
C4521	ECA1CAK470X	E. CAPACITOR 16V 47U	1	
C4522	ECA1CAK100X	E. CAPACITOR 16V 10U	1	
C4523	ECA1HAK2R2X	E. CAPACITOR 50V 2. 2U	1	[SUPPLIED FROM MBV]
C4524	ECA1CAK100X	E. CAPACITOR 16V 10U	1	
C4525	ECA1CAK470X	E. CAPACITOR 16V 47U	1	
C4526	ECQB1H562JF	P. CAPACITOR 50V 5600P	1	
C4527	ECA1CAK100X	E. CAPACITOR 16V 10U	1	
C4528	ECUM1H104ZFN	C. CAPACITOR CH 50V 0. 1U	1	

Ref. No.	Part No.	Part Name & Description	Pcs	Remarks
C4529	ECEA1CKS470	E. CAPACITOR 16V 47U	1	
C4530	ECUM1E104KBN	C. CAPACITOR CH 25V 0. 1U	1	
C4531	ECUM1H103KBN	C. CAPACITOR CH 50V 0. 01U	1	
C4532	ECUM1H561JCN	C. CAPACITOR CH 50V 560P	1	
C4533	ECUM1H104ZFN	C. CAPACITOR CH 50V 0. 1U	1	
C4534	ECEA0JKS331	E. CAPACITOR 6. 3V 330U	1	
C4535	ECUM1H471JCN	C. CAPACITOR CH 50V 470P	1	
C4540	ECUM1H102KBN	C. CAPACITOR CH 50V 1000P	1	
C4901, 02	ECUM1H470JCN	C. CAPACITOR CH 50V 47P	2	
C4903-09	ECUM1H471KBN	C. CAPACITOR CH 50V 470P	7	
C4912, 13	ECUM1H470JCN	C. CAPACITOR CH 50V 47P	2	
C4914	ECUM1H471KBN	C. CAPACITOR CH 50V 470P	1	
C4917	ECUM1E104KBN	C. CAPACITOR CH 25V 0. 1U	1	
C4921	ECUM1E104KBN	C. CAPACITOR CH 25V 0. 1U	1	
C4922	ECEA1CKA470	E. CAPACITOR 16V 47U	1	
C4923	ECUM1E104KBN	C. CAPACITOR CH 25V 0. 1U	1	
C4925	ECUM1H104ZFN	C. CAPACITOR CH 50V 0. 1U	1	
C4926	ECEA1CKA470	E. CAPACITOR 16V 47U	1	
C4927	ECUM1H104ZFN	C. CAPACITOR CH 50V 0. 1U	1	
C4928	ECEA0JKA331	E. CAPACITOR 6. 3V 330U	1	
C4929	ECUM1H104ZFN	C. CAPACITOR CH 50V 0. 1U	1	
C4932	ECUM1H104ZFN	C. CAPACITOR CH 50V 0. 1U	1	
C4933	ECEA1CKA470	E. CAPACITOR 16V 47U	1	
C4935	ECUM1H222KBN	C. CAPACITOR CH 50V 2200P	1	
C4938	ECUM1H222KBN	C. CAPACITOR CH 50V 2200P	1	
C4939	ECUM1H104ZFN	C. CAPACITOR CH 50V 0. 1U	1	
C4940	ECEA0JKA331	E. CAPACITOR 6. 3V 330U	1	
C4941	ECUM1E104KBN	C. CAPACITOR CH 25V 0. 1U	1	
C6001	ECEA0JKA470	E. CAPACITOR 6. 3V 47U	1	
C6002	ECUM1H103ZFN	C. CAPACITOR CH 50V 0. 01U	1	
C6003	ECUM1H200JCN	C. CAPACITOR CH 50V 20P	1	
C6004	ECUM1H120JCN	C. CAPACITOR CH 50V 12P	1	
C6005	ECUM1H103ZFN	C. CAPACITOR CH 50V 0. 01U	1	
C6006	ECUM1H471JCN	C. CAPACITOR CH 50V 470P	1	
C6007, 08	ECUM1H121JCN	C. CAPACITOR CH 50V 120P	2	
C6009	ECUM1H681JCN	C. CAPACITOR CH 50V 680P	1	
C6010	ECUM1H104ZFN	C. CAPACITOR CH 50V 0. 1U	1	
C6011	ECEA0JKA470	E. CAPACITOR 6. 3V 47U	1	
C6012	ECUM1H102KBN	C. CAPACITOR CH 50V 1000P	1	
C6013	ECUM1H180JCN	C. CAPACITOR CH 50V 18P	1	
C6016	ECUM1H180JCN	C. CAPACITOR CH 50V 18P	1	
C6017	ECEA1CKA100	E. CAPACITOR 16V 10U	1	
C6018	ECUM1H102KBN	C. CAPACITOR CH 50V 1000P	1	
C6019	ECUM1H151JCN	C. CAPACITOR CH 50V 150P	1	
C6022	ECUM1H103ZFN	C. CAPACITOR CH 50V 0. 01U	1	
C7301	ECUM1H103KBN	C. CAPACITOR CH 50V 0. 01U	1	
C7302, 03	ECEA1HKNR47	E. CAPACITOR 50V 0. 47U	2	
C7304	ECUM1H681JCN	C. CAPACITOR CH 50V 680P	1	
C7305, 06	ECUM1H123KBN	C. CAPACITOR CH 50V 0. 012U	2	
C7307	ECUM1H681JCN	C. CAPACITOR CH 50V 680P	1	
C7308	ECEA1HKNR47	E. CAPACITOR 50V 0. 47U	1	
C7309, 10	ECUM1H103KBN	C. CAPACITOR CH 50V 0. 01U	2	
C7312, 13	ECEA1CKA100	E. CAPACITOR 16V 10U	2	
C7316	ECUM1H104ZFN	C. CAPACITOR CH 50V 0. 1U	1	
C7317	ECEA0JKA101	E. CAPACITOR 6. 3V 100U	1	
C7318	ECEA1CKA100	E. CAPACITOR 16V 10U	1	
C7319	ECEA1CKA470	E. CAPACITOR 16V 47U	1	
C7320	ECUM1H472KBN	C. CAPACITOR CH 50V 4700P	1	
C7321	ECEA1HKAR47	E. CAPACITOR 50V 0. 47U	1	
C7322	ECEA1HKNR47	E. CAPACITOR 50V 0. 47U	1	
C7323	ECUM1H104KBN	C. CAPACITOR CH 50V 0. 1U	1	
C7326-28	ECUM1H152KBM	C. CAPACITOR CH 50V 1500P	3	[SUPPLIED FROM MBV]
C7501	ECUM1H103ZFN	C. CAPACITOR CH 50V 0. 01U	1	
C7502	ECEA1HKA100	E. CAPACITOR 50V 10U	1	
C7503	ECUM1H120JCN	C. CAPACITOR CH 50V 12P	1	
C7504	ECEA0JKA101	E. CAPACITOR 6. 3V 100U	1	
C7505	ECUM1H104ZFN	C. CAPACITOR CH 50V 0. 1U	1	
C7506	VCE0073	SUPER CAPACITOR	1	
C7507	ECEA0JKA221	E. CAPACITOR 6. 3V 220U	1	
C7508	ECUM1H683ZFN	C. CAPACITOR CH 50V 0. 068U	1	
C7509	ECUM1H103ZFN	C. CAPACITOR CH 50V 0. 01U	1	
C7601	ECEA0JKA101	E. CAPACITOR 6. 3V 100U	1	
C7602	ECUM1H221JCN	C. CAPACITOR CH 50V 220P	1	
C7603	ECEA0JKA101	E. CAPACITOR 6. 3V 100U	1	
C7605, 06	ECUM1H330JCN	C. CAPACITOR CH 50V 33P	2	

Ref. No.	Part No.	Part Name & Description	Pcs	Remarks
C7607	ECEA0JKA101	E. CAPACITOR 6. 3V 100U	1	
C7608	ECUM1H103ZFN	C. CAPACITOR CH 50V 0. 01U	1	
C7610	ECEA1HKA100	E. CAPACITOR 50V 10U	1	
C7611	ECUM1H104ZFN	C. CAPACITOR CH 50V 0. 1U	1	
C7612	ECUM1H221JCN	C. CAPACITOR CH 50V 220P	1	
C7613	ERJ6GMZ0R00	M. RESISTOR CH 1/10W 0	1	
C7615	ECQV1H104JM	P. CAPACITOR 50V 0. 1U	1	
C7618	ECUM1E104KBN	C. CAPACITOR CH 25V 0. 1U	1	
C7619	ECUM1H104ZFN	C. CAPACITOR CH 50V 0. 1U	1	
C7620, 21	ECA1HAK2R2X	E. CAPACITOR 50V 2. 2U	2	[SUPPLIED FROM MBV]
C7623	ECUM1H330JCN	C. CAPACITOR CH 50V 33P	1	
C7701, 02	ECUM1H104ZFN	C. CAPACITOR CH 50V 0. 1U	2	
C7705	ECUM1H104ZFN	C. CAPACITOR CH 50V 0. 1U	1	
C7708	ECUM1H104ZFN	C. CAPACITOR CH 50V 0. 1U	1	
C7709	ECEA0JKA470	E. CAPACITOR 6. 3V 47U	1	
C7711	ECUM1C105ZFN	C. CAPACITOR CH 16V 1U	1	
C7712, 13	ECUM1H103ZFN	C. CAPACITOR CH 50V 0. 01U	2	
C7714	ECUM1H470JCN	C. CAPACITOR CH 50V 47P	1	
C7715	ECUM1C105ZFN	C. CAPACITOR CH 16V 1U	1	
C7716	ECUM1H471JCN	C. CAPACITOR CH 50V 470P	1	
C7717	ECUM1C105ZFN	C. CAPACITOR CH 16V 1U	1	
C7718	ECUM1H471JCN	C. CAPACITOR CH 50V 470P	1	
C7720	ECEA0JKA470	E. CAPACITOR 6. 3V 47U	1	
C7721	ECEA1EKA4R7	E. CAPACITOR 25V 4. 7U	1	
C7722, 23	ECUM1H104ZFN	C. CAPACITOR CH 50V 0. 1U	2	
C7728	ECEA1EKA4R7	E. CAPACITOR 25V 4. 7U	1	
C7729	ECUM1H104ZFN	C. CAPACITOR CH 50V 0. 1U	1	
C7730	ECEA0JKA101	E. CAPACITOR 6. 3V 100U	1	
C7731	ECUM1H820JCN	C. CAPACITOR CH 50V 82P	1	
C7735, 36	ECUM1H104ZFN	C. CAPACITOR CH 50V 0. 1U	2	
C7739	ECUM1H104ZFN	C. CAPACITOR CH 50V 0. 1U	1	
C7740	ECEA0JKA470	E. CAPACITOR 6. 3V 47U	1	
C7742	ECUM1H104ZFN	C. CAPACITOR CH 50V 0. 1U	1	
C7749, 50	ECUM1H270JCN	C. CAPACITOR CH 50V 27P	2	
C7752	ECEA0JKA470	E. CAPACITOR 6. 3V 47U	1	
C7802	ECEA0JKA470	E. CAPACITOR 6. 3V 47U	1	
C7803	ECUM1C105ZFN	C. CAPACITOR CH 16V 1U	1	
C7804	ECUM1H221JCN	C. CAPACITOR CH 50V 220P	1	
D0702	MA77	DIODE	1	
D1003	1SS254	DIODE	1	
D1004	MA4051N-H	DIODE	1	
D1006	MA4051N-L	DIODE	1	
D1009	MA4051N-M	DIODE	1	
D1010	1SS254	DIODE	1	
D1015, 16	1SS254	DIODE	2	
D1017	MA4120N-M	DIODE	1	[SUPPLIED FROM MBV]
D1018, 19	1SS254	DIODE	2	
D1501	SIR505S	DIODE	1	
D2501, 02	1SS254	DIODE	2	
D3001	1SS254	DIODE	1	
D4905, 06	MA4075-M	DIODE	2	
D6002, 03	MA700	DIODE	2	
D7501	MA4220N-M	DIODE	1	[SUPPLIED FROM MBV]
D7503	RB441P	DIODE	1	
D7601	MA4300M	DIODE	1	
D7603, 04	1SS254	DIODE	2	
DP7501	VSL0533-B	FIP	1	[SUPPLIED FROM MBV]
IC0701	LA75503	IC	1	[SUPPLIED FROM MBV]
IC1001	PQ20VB2E	IC	1	[SUPPLIED FROM MBV]
IC1201	UPC1093J	IC	1	[SUPPLIED FROM MBV]
IC1501, 02	RPI354N	IC	2	[SUPPLIED FROM MBV]
IC2502	AN3811NK	IC	1	[SUPPLIED FROM MBV]
IC3001	TDA9735HV3	IC	1	[SUPPLIED FROM MBV]
IC3501	AN3368SB	IC	1	[SUPPLIED FROM MBV]
IC4001	NJM4558M	IC	1	
IC4501	TDA9605H	IC	1	[SUPPLIED FROM MBV]
IC4901	LA73021M	IC	1	
IC6001	M3777AVCEZ	IC	1	[SUPPLIED FROM MBV]
IC7301	TDA9873H	IC	1	[SUPPLIED FROM MBV]
IC7501	M35502AFP	IC	1	
IC7502	S80743AL	IC	1	
IC7503	PNA4611M02VT	IR RECEIVER UNIT	1	[SUPPLIED FROM MBV]

Ref. No.	Part No.	Part Name & Description	Pcs	Remarks
IC7504	RN5VD28AA	IC	1	[SUPPLIED FROM MBV]
IC7701	M3506SWVAX	IC	1	[SUPPLIED FROM MBV]
IC7703	M3062SVCEY	IC	1	[SUPPLIED FROM MBV]
IC7704	M24C16-WBN6	IC	1	[SUPPLIED FROM MBV]
⚠ IP1001, 02	UNH000300A	IC PROTECTOR	2	
⚠ IP1201, 02	UNH000300A	IC PROTECTOR	2	
JK4901	VJJ0377	RCA JACK	1	[SUPPLIED FROM MBV]
JK4903	VJS3634	21-PIN SCART JACK	1	[SUPPLIED FROM MBV]
K0703	ERJ3GEY0R00	M. RESISTOR CH 1/16W 0	1	
K0707	ERJ3GEY0R00	M. RESISTOR CH 1/16W 0	1	
K0709	ERJ3GEY0R00	M. RESISTOR CH 1/16W 0	1	
K2501	ERJ6GMZ0R00	M. RESISTOR CH 1/10W 0	1	
K2503	ERJ6GMZ0R00	M. RESISTOR CH 1/10W 0	1	
K3003	ERJ6GMZ0R00	M. RESISTOR CH 1/10W 0	1	
K7301	ERJ6GEY0R00	M. RESISTOR CH 1/10W 0	1	
K7603	ERJ6GMZ0R00	M. RESISTOR CH 1/10W 0	1	
L0701	ELJNAR18JF	CHIP INDUCTOR	1	[SUPPLIED FROM MBV]
L0703	ELJNA2R2JF	CHIP INDUCTOR	1	
L2503	VLQ0599J680	COIL 68UH	1	
L3001	VLQ0599J220	COIL 22UH	1	
L3003	VLQ0599J470	COIL 47UH	1	
L3004	VLQ0599J680	COIL 68UH	1	
L3005, 06	VLQ0599J101	COIL 100UH	2	
L3007	VLQ0599J330	COIL 33UH	1	
L3008	VLQ0599J470	COIL 47UH	1	
L3009	VLQ0599J390	COIL 39UH	1	
L3010	VLQ0599J560	COIL 56UH	1	
L3501	VLQ0599J330	COIL 33UH	1	
L4001	ELELN153JA	INDUCTOR 15000UH	1	[SUPPLIED FROM MBV]
L4007	VLQ0599J680	COIL 68UH	1	
L4501	VLQ0599J100	COIL 10UH	1	
L4901	VLQ0599JR22	COIL 0.22UH	1	[SUPPLIED FROM MBV]
L4902-04	VLQ0599J680	COIL 68UH	3	
L6001	VLQ0599J101	COIL 100UH	1	
L6002	VLQ0599J2R2	COIL 2.2UH	1	
L7601-04	VLQ0599J330	COIL 33UH	4	
L7605	VLQ0599J100	COIL 10UH	1	
L7701, 02	VLQ0599J390	COIL 39UH	2	
L7704	VLQ0599J390	COIL 39UH	1	
L7706	VLQ0599J100	COIL 10UH	1	
L7707	VLQ0599J220	COIL 22UH	1	
L7801	VLQ0599J680	COIL 68UH	1	
LB3001, 02	ERJ6GMZ0R00	M. RESISTOR CH 1/10W 0	2	
LB3501-04	VLP0145	COIL	4	
LB4901-04	ERJ6GMYJ221	M. RESISTOR CH 1/10W 220	4	
LB4906, 07	ERJ6GMYJ221	M. RESISTOR CH 1/10W 220	2	
P1001	VJS3917A016W	CONNECTOR (FEMALE) 16P	1	
P1501	VJS3837A002	CONNECTOR (FEMALE) 2P	1	
P2501	VJP3835A012	CONNECTOR (MALE) 12P	1	
P2502	VJS3537A009G	CONNECTOR (FEMALE) 9P	1	
P3502	VJS3537A010G	CONNECTOR (FEMALE) 10P	1	
P4002	VJS3837A002	CONNECTOR (FEMALE) 2P	1	
P4003	VJS3537A006G	CONNECTOR (FEMALE) 6P	1	
PK0701	VJR0826E009W	CONNECTOR (MALE) 9P	1	
PK7301	VJR0777B007W	CONNECTOR (MALE) 7P	1	
PK7302	VJR0777B006W	CONNECTOR (MALE) 6P	1	
PP0701	VJP3589A004B	CONNECTOR (MALE) 4P	1	
Q0702	2SD601A-S	TRANSISTOR	1	
Q1001	2SD601A	TRANSISTOR	1	
Q1002	2SD602A	TRANSISTOR	1	
Q1003	2SD1996-S	TRANSISTOR	1	
Q1004	2SB710A	TRANSISTOR	1	
Q1005, 06	2SD1996-S	TRANSISTOR	2	
Q1007	2SD602A-R	TRANSISTOR	1	
Q1009	2SD1996-S	TRANSISTOR	1	
Q1010	2SD601A	TRANSISTOR	1	

Ref. No.	Part No.	Part Name & Description	Pcs	Remarks
Q1201, 02	2SD1996-S	TRANSISTOR	2	
Q1501	PNB2301MBV	TRANSISTOR	1	
Q1502	PNB2301MAV	TRANSISTOR	1	
Q3003	2SB709A	TRANSISTOR	1	
Q4001	2SD1149	TRANSISTOR	1	
Q4002	2SD601A	TRANSISTOR	1	
Q4006	2SB710A-R	TRANSISTOR	1	
Q4007	2SD602A-R	TRANSISTOR	1	
Q4901	2SB709A	TRANSISTOR	1	
Q4903, 04	2SD601A	TRANSISTOR	2	
Q4905	2SD1328-S	TRANSISTOR	1	
Q7601	2SD601A	TRANSISTOR	1	
Q7604	2SD601A	TRANSISTOR	1	
Q7605	2SB709A	TRANSISTOR	1	
Q7606	2SD601A	TRANSISTOR	1	
Q7701	2SD601A	TRANSISTOR	1	
Q7702	2SB709A	TRANSISTOR	1	
Q7703	2SD601A	TRANSISTOR	1	
Q7709	2SB709A	TRANSISTOR	1	
Q7802	2SD601A	TRANSISTOR	1	
QR1001	MUN2112	TRANSISTOR-RESISTOR	1	
QR1002	MUN2211	TRANSISTOR-RESISTOR	1	
QR1003	MUN2212	TRANSISTOR-RESISTOR	1	
QR3006, 07	MUN2212	TRANSISTOR-RESISTOR	2	
QR4001	UN2217	TRANSISTOR-RESISTOR	1	
QR4002	MUN2113	TRANSISTOR-RESISTOR	1	
QR4004	MUN2212	TRANSISTOR-RESISTOR	1	
QR4006	MUN2111	TRANSISTOR-RESISTOR	1	
QR4502-05	UN2215	TRANSISTOR	4	
QR4506	MUN2113	TRANSISTOR-RESISTOR	1	
QR4903	MUN2212	TRANSISTOR-RESISTOR	1	
QR6002	MUN2211	TRANSISTOR-RESISTOR	1	
QR6003, 04	MUN2212	TRANSISTOR-RESISTOR	2	
QR6005	MUN2211	TRANSISTOR-RESISTOR	1	
QR6006	MUN2213	TRANSISTOR-RESISTOR	1	
QR6007	MUN2113	TRANSISTOR-RESISTOR	1	
R0705	ERJ3GEYJ362	M. RESISTOR CH 1/16W 3.6K	1	
R0707	ERJ3GEYJ393	M. RESISTOR CH 1/16W 39K	1	
R0708	ERJ3GEYJ103	M. RESISTOR CH 1/16W 10K	1	
R0711	ERJ3GEYJ181	M. RESISTOR CH 1/16W 180	1	
R0713	ERJ3GEY0R00	M. RESISTOR CH 1/16W 0	1	
R0715	ERJ3GEYJ223	M. RESISTOR CH 1/16W 22K	1	
R0717	ERJ3GEYJ471	M. RESISTOR CH 1/16W 470	1	
R0719	ERJ3GEYJ472	M. RESISTOR CH 1/16W 4.7K	1	
R0725	ERJ6GEYJ101	M. RESISTOR CH 1/10W 100	1	
R0726	ERJ3GEYJ683	M. RESISTOR CH 1/16W 68K	1	
R0727	ERJ3GEY0R00	M. RESISTOR CH 1/16W 0	1	
R0729	ERJ3GEYJ103	M. RESISTOR CH 1/16W 10K	1	
R0730	ERJ6GEYG103	M. RESISTOR CH 1/10W 10K	1	
R0740	ERJ3GEYG271	M. RESISTOR CH 1/16W 270	1	[SUPPLIED FROM MBV]
R0741	ERJ3GEYJ221	M. RESISTOR CH 1/16W 220	1	
R0742	ERJ8GEYJ151	M. RESISTOR CH 1/8W 150	1	
R0745	ERJ6GEYJ335	M. RESISTOR CH 1/10W 3.3M	1	
R1001, 02	ERJ6GMYJ333	M. RESISTOR CH 1/10W 33K	2	
R1003, 04	ERJ6GMYJ562	M. RESISTOR CH 1/10W 5.6K	2	
R1005	ERDS2TJ182	C. RESISTOR 1/4W 1.8K	1	
R1006	ERJ6GMYJ472	M. RESISTOR CH 1/10W 4.7K	1	
R1008	ERDS2TJ682	C. RESISTOR 1/4W 6.8K	1	
R1009, 10	ERJ6GMYJ103	M. RESISTOR CH 1/10W 10K	2	
R1011	ERJ6GMYG823	M. RESISTOR CH 1/10W 82K	1	
R1012	ERDS2TJ272	C. RESISTOR 1/4W 2.7K	1	
R1013	ERJ6GMYG153	M. RESISTOR CH 1/10W 15K	1	
R1014	ERJ6GMYG163	M. RESISTOR CH 1/10W 16K	1	
R1015	ERJ6GMYG123	M. RESISTOR CH 1/10W 12K	1	
R1016, 17	ERJ6GMYJ563	M. RESISTOR CH 1/10W 56K	2	
R1018, 19	ERJ6GMYJ683	M. RESISTOR CH 1/10W 68K	2	
R1022	ERJ6GMYJ103	M. RESISTOR CH 1/10W 10K	1	
R1023	ERJ6GMYJ123	M. RESISTOR CH 1/10W 12K	1	
R1024	ERJ6GMYJ103	M. RESISTOR CH 1/10W 10K	1	
R1026	ERJ6GMYJ152	M. RESISTOR CH 1/10W 1.5K	1	
R1027	ERDS2TJ123	C. RESISTOR 1/4W 12K	1	
R1028	ERJ6GMYJ102	M. RESISTOR CH 1/10W 1K	1	
R1029	ERJ6GMYG562	M. RESISTOR CH 1/10W 5.6K	1	

Ref.No.	Part No.	Part Name & Description	Pcs	Remarks
R1030	ERJ6GMYG622	M.RESISTOR CH 1/10W 6.2K	1	
R1201,02	ERJ6GMYG272	M.RESISTOR CH 1/10W 2.7K	2	
R1203	ERJ6GMYJ623	M.RESISTOR CH 1/10W 6.2K	1	
R1204	ERDS2TJ102	C.RESISTOR 1/4W 1K	1	
R1501	ERJ6GMYJ101	M.RESISTOR CH 1/10W 100	1	
R1502	ERJ6GMYJ273	M.RESISTOR CH 1/10W 27K	1	
R1503	ERDS2TJ181	C.RESISTOR 1/4W 180	1	
R1504	ERJ6GMYJ273	M.RESISTOR CH 1/10W 27K	1	
R1505	ERDS2TJ121	C.RESISTOR 1/4W 120	1	
R2501	ERDS2TJ331	C.RESISTOR 1/4W 330	1	
R2502	ERJ6GMYG433	M.RESISTOR CH 1/10W 43K	1	
R2503	ERDS2TJ330	C.RESISTOR 1/4W 33	1	
R2504	ERJ6GMZ0R00	M.RESISTOR CH 1/10W 0	1	
R2505	ERJ6GMYJ103	M.RESISTOR CH 1/10W 10K	1	
R2506	ERJ6GMYJ102	M.RESISTOR CH 1/10W 1K	1	
R2507	ERJ6GMYJ392	M.RESISTOR CH 1/10W 3.9K	1	
R2508	ERDS2TJ330	C.RESISTOR 1/4W 33	1	
R2509	ERJ6GMYJ102	M.RESISTOR CH 1/10W 1K	1	
R2510	ERJ6GMYJ105	M.RESISTOR CH 1/10W 1M	1	
R2513	ERJ6GMYJ274	M.RESISTOR CH 1/10W 270	1	
R2514	ERJ6GMYJ103	M.RESISTOR CH 1/10W 10K	1	
R2517	ERDS1TJ1R2	C.RESISTOR 1/2W 1.2	1	
R2518	ERDS1TJ1R5	C.RESISTOR 1/2W 1.5	1	
R2519	ERDS2TJ330	C.RESISTOR 1/4W 33	1	
R3001	ERJ6GMYJ183	M.RESISTOR CH 1/10W 18K	1	
R3002	ERJ6GMYG301	M.RESISTOR CH 1/10W 300	1	
R3004	ERJ6GMYJ472	M.RESISTOR CH 1/10W 4.7K	1	
R3005	ERJ6GMZ0R00	M.RESISTOR CH 1/10W 0	1	
R3007	ERJ6GMZ0R00	M.RESISTOR CH 1/10W 0	1	
R3008	ERJ6GMYJ152	M.RESISTOR CH 1/10W 1.5K	1	
R3009	ERJ6GMYJ101	M.RESISTOR CH 1/10W 100	1	
R3010	ERJ6GMYJ473	M.RESISTOR CH 1/10W 47K	1	
R3011,12	ERJ6GMYJ101	M.RESISTOR CH 1/10W 100	2	
R3020	ERJ6GMZ0R00	M.RESISTOR CH 1/10W 0	1	
R3021	ERJ6GMYJ684	M.RESISTOR CH 1/10W 680K	1	
R3022	ERJ6GMYJ224	M.RESISTOR CH 1/10W 220K	1	
R3023	ERJ6GMYJ332	M.RESISTOR CH 1/10W 3.3K	1	
R3024	ERJ6GMYG271	M.RESISTOR CH 1/10W 270	1	
R3025	ERJ6GMYG102	M.RESISTOR CH 1/10W 1K	1	
R3026	ERJ6GMYG152	M.RESISTOR CH 1/10W 1.5K	1	
R3027	ERJ6GMYJ562	M.RESISTOR CH 1/10W 5.6K	1	
R3028	ERJ6GMYG152	M.RESISTOR CH 1/10W 1.5K	1	
R3029	ERJ6GMYG331	M.RESISTOR CH 1/10W 330	1	
R3030	ERJ6GMYJ123	M.RESISTOR CH 1/10W 12K	1	
R3031	ERJ6GMYJ225	M.RESISTOR CH 1/10W 2.2M	1	
R3032	ERJ6GMYG391	M.RESISTOR CH 1/10W 390	1	
R3033	ERJ6GMYG471	M.RESISTOR CH 1/10W 470	1	
R3034	ERJ6GMYG561	M.RESISTOR CH 1/10W 560	1	
R3035	ERJ6GMYG271	M.RESISTOR CH 1/10W 270	1	
R3036	ERJ6GMYJ272	M.RESISTOR CH 1/10W 2.7K	1	
R3040	ERJ6GMZ0R00	M.RESISTOR CH 1/10W 0	1	
R3505	ERJ6GMYJ101	M.RESISTOR CH 1/10W 100	1	
R4001	ERJ6GMYG334	M.RESISTOR CH 1/10W 330K	1	
R4002	ERJ6GMYG103	M.RESISTOR CH 1/10W 10K	1	
R4003	ERJ6GMYJ753	M.RESISTOR CH 1/10W 75K	1	
R4004	ERJ6GMYJ153	M.RESISTOR CH 1/10W 15K	1	
R4005	ERJ6GMYG241	M.RESISTOR CH 1/10W 240	1	
R4006	ERJ6GMYJ223	M.RESISTOR CH 1/10W 22K	1	
R4007	ERJ6GMYJ472	M.RESISTOR CH 1/10W 4.7K	1	
R4008	ERJ6GMYJ222	M.RESISTOR CH 1/10W 2.2K	1	
R4009	ERJ6GMYJ181	M.RESISTOR CH 1/10W 180	1	
R4010	ERJ6GMYJ391	M.RESISTOR CH 1/10W 390	1	
R4011	ERJ6GMYJ392	M.RESISTOR CH 1/10W 3.9K	1	
R4012	ERJ6GMZ0R00	M.RESISTOR CH 1/10W 0	1	
R4014	ERJ6GMYK225	M.RESISTOR CH 1/10W 2.2M	1	
R4015	ERJ6GMYJ272	M.RESISTOR CH 1/10W 2.7K	1	
R4016	ERJ6GMYJ182	M.RESISTOR CH 1/10W 1.8K	1	
R4019	ERJ6GMYJ101	M.RESISTOR CH 1/10W 100	1	
R4036	ERJ6GMYJ682	M.RESISTOR CH 1/10W 6.8K	1	
R4037	ERJ6GMYJ222	M.RESISTOR CH 1/10W 2.2K	1	
R4038,39	ERJ6GMYJ154	M.RESISTOR CH 1/10W 150K	2	
R4049	ERJ6GMYJ473	M.RESISTOR CH 1/10W 47K	1	
R4060	ERJ6GMYJ822	M.RESISTOR CH 1/10W 8.2K	1	
R4061	ERJ6GMYJ332	M.RESISTOR CH 1/10W 3.3K	1	
R4062	ERJ6GMYJ272	M.RESISTOR CH 1/10W 2.7K	1	

Ref.No.	Part No.	Part Name & Description	Pcs	Remarks
R4063	ERJ6GMYJ332	M.RESISTOR CH 1/10W 3.3K	1	
R4067	ERJ6GMYJ682	M.RESISTOR CH 1/10W 6.8K	1	
R4068	ERJ6GMYJ222	M.RESISTOR CH 1/10W 2.2K	1	
R4069,70	ERJ6GMYJ154	M.RESISTOR CH 1/10W 150K	2	
R4071	ERJ6GMYJ103	M.RESISTOR CH 1/10W 10K	1	
R4072	ERJ6GMYJ224	M.RESISTOR CH 1/10W 220K	1	
R4073	ERJ6GMYJ472	M.RESISTOR CH 1/10W 4.7K	1	
R4503-06	ERJ6GMYJ753	M.RESISTOR CH 1/10W 75K	4	
R4509	ERJ6GMYK335	M.RESISTOR CH 1/10W 3.3M	1	
R4510	ERJ6GMYJ221	M.RESISTOR CH 1/10W 220	1	
R4512	ERJ6GMYJ221	M.RESISTOR CH 1/10W 220	1	
R4514	ERJ6GMYJ221	M.RESISTOR CH 1/10W 220	1	
R4516,17	ERJ6GMYJ104	M.RESISTOR CH 1/10W 100K	2	
R4518,19	ERJ6GMYJ221	M.RESISTOR CH 1/10W 220	2	
R4520	ERJ6GMYJ223	M.RESISTOR CH 1/10W 22K	1	
R4521	ERJ6GMYJ393	M.RESISTOR CH 1/10W 39K	1	
R4522	ERJ6GMYJ332	M.RESISTOR CH 1/10W 3.3K	1	
R4523	ERJ6RBD393	M.RESISTOR CH 1/10W 39K	1	[SUPPLIED FROM MBV]
R4524	ERJ6GMYJ332	M.RESISTOR CH 1/10W 3.3K	1	
R4525	ERJ6GMYJ393	M.RESISTOR CH 1/10W 39K	1	
R4526	ERJ6GMYJ221	M.RESISTOR CH 1/10W 220	1	
R4527	ERJ6GMYJ103	M.RESISTOR CH 1/10W 10K	1	
R4528	ERJ6GMYJ102	M.RESISTOR CH 1/10W 1K	1	
R4529,30	ERJ6GMYJ391	M.RESISTOR CH 1/10W 390	2	
R4539	ERJ6GMYJ223	M.RESISTOR CH 1/10W 22K	1	
R4901,02	ERJ6GMYJ331	M.RESISTOR CH 1/10W 330	2	
R4905	ERDS2TJ471	C.RESISTOR 1/4W 470	1	
R4907,08	ERJ6GMYJ221	M.RESISTOR CH 1/10W 220	2	
R4911	ERJ6GMYJ221	M.RESISTOR CH 1/10W 220	1	
R4912	ERJ6GMYJ472	M.RESISTOR CH 1/10W 4.7K	1	
R4913	ERJ6GMYJ153	M.RESISTOR CH 1/10W 15K	1	
R4915	ERJ6GMYJ223	M.RESISTOR CH 1/10W 22K	1	
R4916	ERJ6GMYJ471	M.RESISTOR CH 1/10W 470	1	
R4921	ERJ6GMYJ331	M.RESISTOR CH 1/10W 330	1	
R4923	ERJ6GMYJ331	M.RESISTOR CH 1/10W 330	1	
R4924,25	ERJ6GMYJ750	M.RESISTOR CH 1/10W 75	2	
R4926,27	ERJ6GMYJ473	M.RESISTOR CH 1/10W 47K	2	
R4928,29	ERJ6GMYJ750	M.RESISTOR CH 1/10W 75	2	
R4931	ERJ6GMYJ103	M.RESISTOR CH 1/10W 10K	1	
R4933	ERJ6GMYJ911	M.RESISTOR CH 1/10W 910	1	
R4934	ERJ6GMYJ102	M.RESISTOR CH 1/10W 1K	1	
R6001	ERJ6GMYJ562	M.RESISTOR CH 1/10W 5.6K	1	
R6002,03	ERJ6GMYJ102	M.RESISTOR CH 1/10W 1K	2	
R6005	ERJ6GMYJ103	M.RESISTOR CH 1/10W 10K	1	
R6006	ERJ6GMYJ102	M.RESISTOR CH 1/10W 1K	1	
R6007	ERJ6GMYJ273	M.RESISTOR CH 1/10W 27K	1	
R6008	ERJ6GMYJ224	M.RESISTOR CH 1/10W 220K	1	
R6010	ERJ6GMYJ153	M.RESISTOR CH 1/10W 15K	1	
R6011	ERJ6GMYJ103	M.RESISTOR CH 1/10W 10K	1	
R6012,13	ERJ6GMYJ472	M.RESISTOR CH 1/10W 4.7K	2	
R6014	ERJ6GMZ0R00	M.RESISTOR CH 1/10W 0	1	
R6015	ERJ6GMYJ103	M.RESISTOR CH 1/10W 10K	1	
R6016	ERJ6GMYJ153	M.RESISTOR CH 1/10W 15K	1	
R6017	ERJ6GMYJ682	M.RESISTOR CH 1/10W 6.8K	1	
R6018	ERDS2TJ221	C.RESISTOR 1/4W 220	1	
R6020	ERJ6GMYJ102	M.RESISTOR CH 1/10W 1K	1	
R6022	ERJ6GMYJ102	M.RESISTOR CH 1/10W 1K	1	
R6023-30	ERJ6GMYJ221	M.RESISTOR CH 1/10W 220	8	
R6031	ERJ6GMYJ273	M.RESISTOR CH 1/10W 27K	1	
R6032	ERJ6GMYJ393	M.RESISTOR CH 1/10W 39K	1	
R6033	ERJ6GMYJ273	M.RESISTOR CH 1/10W 27K	1	
R6036	ERJ6GMYJ101	M.RESISTOR CH 1/10W 100	1	
R6038	ERJ6GMYJ433	M.RESISTOR CH 1/10W 43K	1	
R6039	ERJ6GMYJ393	M.RESISTOR CH 1/10W 39K	1	
R7301	ERJ6GEY0R00	M.RESISTOR CH 1/10W 0	1	
R7304	ERJ6GEYJ472	M.RESISTOR CH 1/10W 4.7K	1	
R7305,06	ERJ6GEYJ562	M.RESISTOR CH 1/10W 5.6K	2	
R7307,08	ERJ6GEYG682	M.RESISTOR CH 1/10W 6.8K	2	
R7309	ERJ6GEYG221	M.RESISTOR CH 1/10W 220	1	
R7311	ERJ6GEYJ752	M.RESISTOR CH 1/10W 7.5K	1	
R7312,13	ERJ6GEYJ101	M.RESISTOR CH 1/10W 100	2	
R7314	ERJ6GEYG332	M.RESISTOR CH 1/10W 3.3K	1	
R7315	ERJ6GEY0R00	M.RESISTOR CH 1/10W 0	1	
R7316	ERJ6GEYG682	M.RESISTOR CH 1/10W 6.8K	1	
R7317,18	ERJ6GEY0R00	M.RESISTOR CH 1/10W 0	2	

Ref. No.	Part No.	Part Name & Description	Pcs	Remarks
R7319, 20	ERJ6GEYG332	M. RESISTOR CH 1/10W 3. 3K	2	
R7501	ERDS2TJ150	C. RESISTOR 1/4W 15	1	
R7502	ERJ6GMYJ101	M. RESISTOR CH 1/10W 100	1	
R7503, 04	ERJ6GMYJ202	M. RESISTOR CH 1/10W 2K	2	
R7505	ERJ6GMZOR00	M. RESISTOR CH 1/10W 0	1	
R7506-08	ERJ6GMYJ332	M. RESISTOR CH 1/10W 3. 3K	3	
R7509	ERJ6GMYJ822	M. RESISTOR CH 1/10W 8. 2K	1	
R7510	ERJ6GMYJ562	M. RESISTOR CH 1/10W 5. 6K	1	
R7511	ERJ6GMYJ432	M. RESISTOR CH 1/10W 4. 3K	1	
R7512, 13	ERJ6GMYJ103	M. RESISTOR CH 1/10W 10K	2	
R7514	ERJ6GMYJ822	M. RESISTOR CH 1/10W 8. 2K	1	
R7515	ERJ6GMYJ562	M. RESISTOR CH 1/10W 5. 6K	1	
R7516	ERJ6GMYJ432	M. RESISTOR CH 1/10W 4. 3K	1	
R7517	ERJ6GMYJ103	M. RESISTOR CH 1/10W 10K	1	
R7520, 21	ERJ6GMYJ223	M. RESISTOR CH 1/10W 22K	2	
R7522	ERJ6GMYJ181	M. RESISTOR CH 1/10W 180	1	
R7523-26	ERJ6GMYJ303	M. RESISTOR CH 1/10W 30K	4	
R7538	ERJ6GMYJ432	M. RESISTOR CH 1/10W 4. 3K	1	
R7549	ERDS2TJ150	C. RESISTOR 1/4W 15	1	
R7601, 02	ERJ6GMYJ101	M. RESISTOR CH 1/10W 100	2	
R7603	ERJ6GMYJ102	M. RESISTOR CH 1/10W 1K	1	
R7606, 07	ERJ6GMYJ101	M. RESISTOR CH 1/10W 100	2	
R7608, 09	ERDS2TJ331	C. RESISTOR 1/4W 330	2	
R7610	ERJ6GMYJ151	M. RESISTOR CH 1/10W 150	1	
R7612	ERJ6GMZOR00	M. RESISTOR CH 1/10W 0	1	
R7613	ERJ6GMYJ151	M. RESISTOR CH 1/10W 150	1	
R7614	ERJ6GMYJ561	M. RESISTOR CH 1/10W 560	1	
R7615	ERJ6GMYJ103	M. RESISTOR CH 1/10W 10K	1	
R7620	ERJ6GMYJ104	M. RESISTOR CH 1/10W 100K	1	
R7621	ERJ6GMYJ182	M. RESISTOR CH 1/10W 1. 8K	1	
R7622, 23	ERJ6GMYJ154	M. RESISTOR CH 1/10W 150K	2	
R7704	ERJ6GMYJ472	M. RESISTOR CH 1/10W 4. 7K	1	
R7705	ERJ6GMYJ473	M. RESISTOR CH 1/10W 47K	1	
R7707	ERJ6GMYJ471	M. RESISTOR CH 1/10W 470	1	
R7708-10	ERJ6GMYJ511	M. RESISTOR CH 1/10W 510	3	
R7711	ERJ6GMYJ104	M. RESISTOR CH 1/10W 100K	1	
R7712	ERJ6GMYJ102	M. RESISTOR CH 1/10W 1K	1	
R7713	ERJ6GMYJ104	M. RESISTOR CH 1/10W 100K	1	
R7714	ERJ6GMYG153	M. RESISTOR CH 1/10W 15K	1	
R7715	ERJ6GMYG152	M. RESISTOR CH 1/10W 1. 5K	1	
R7716	ERJ6GMYG562	M. RESISTOR CH 1/10W 5. 6K	1	
R7729	ERJ6GMYJ102	M. RESISTOR CH 1/10W 1K	1	
R7730	ERJ6GMYJ332	M. RESISTOR CH 1/10W 3. 3K	1	
R7740	ERJ6GMYJ472	M. RESISTOR CH 1/10W 4. 7K	1	
R7741-44	ERJ6GMYJ101	M. RESISTOR CH 1/10W 100	4	
R7746	ERJ6GMYJ101	M. RESISTOR CH 1/10W 100	1	
R7751, 52	ERJ6GMYJ101	M. RESISTOR CH 1/10W 100	2	
R7753	ERJ6GMYJ272	M. RESISTOR CH 1/10W 2. 7K	1	
R7754-57	ERJ6GMYJ101	M. RESISTOR CH 1/10W 100	4	
R7759	ERJ6GMYJ222	M. RESISTOR CH 1/10W 2. 2K	1	
R7760	ERJ6GMZOR00	M. RESISTOR CH 1/10W 0	1	
R7761	ERJ6GMYJ472	M. RESISTOR CH 1/10W 4. 7K	1	
R7765-67	ERJ6GMYJ101	M. RESISTOR CH 1/10W 100	3	
R7768	ERJ6GMYJ472	M. RESISTOR CH 1/10W 4. 7K	1	
R7769	ERJ6GMYJ101	M. RESISTOR CH 1/10W 100	1	
R7770	ERJ6GMYJ472	M. RESISTOR CH 1/10W 4. 7K	1	
R7771-78	ERJ6GMYJ101	M. RESISTOR CH 1/10W 100	8	
R7784, 85	ERJ6GMYJ472	M. RESISTOR CH 1/10W 4. 7K	2	
R7792-99	ERJ6GMYJ101	M. RESISTOR CH 1/10W 100	8	
R7802, 03	ERJ6GMZOR00	M. RESISTOR CH 1/10W 0	2	
R7804, 05	ERJ6GMYJ102	M. RESISTOR CH 1/10W 1K	2	
R7807	ERJ6GMYJ102	M. RESISTOR CH 1/10W 1K	1	
R7808	ERJ6GMYJ473	M. RESISTOR CH 1/10W 47K	1	
R7809	ERJ6GMYJ472	M. RESISTOR CH 1/10W 4. 7K	1	
S1501	VSS0520-3	MODE SELECT SWITCH	1	[SUPPLIED FROM MBV]
S7501	VES0834	S-TAB SWITCH	1	
S7502-06	EVQ11L07B	SWITCH	5	
T0701	EQV5EC082P	TRANSFORMER	1	[SUPPLIED FROM MBV]
T4001	EQQ7QF024P	TRANSFORMER	1	
⚠ TU7601	ENG47307G1	TUNER	1	[SUPPLIED FROM MBV]
VR0701	EVNCBAA00B14	V. RESISTOR	1	

Ref. No.	Part No.	Part Name & Description	Pcs	Remarks
VR7301	EVNCBAA00B14	V. RESISTOR	1	
X0701	VLF1416	FILTER	1	[SUPPLIED FROM MBV]
X0704	VLF1493	FILTER	1	[SUPPLIED FROM MBV]
X3001	VSX0162	CRYSTAL OSCILLATOR	1	
X6001	VSX0830	CRYSTAL OSCILLATOR	1	
X6002	VSX0660	CRYSTAL OSCILLATOR	1	
X7301	VSX1086	CRYSTAL OSCILLATOR	1	
X7701	VSX1043	CRYSTAL OSCILLATOR	1	
		MISCELLANEOUS		
	VSC4999	SHIELD CASE (MIDDLE)	1	[SUPPLIED FROM MBV]
	VSC4998	HA ANGLE	1	[SUPPLIED FROM MBV]
	VXQ0648	FIP HOLDER	1	
	VMP4894	SUPPORT ANGLE	1	FOR DECODER C. B. A.
	VMP5897	CONNECTING ANGLE	1	FOR TV DEMODULATOR C. B. A.
■	VEP06D25B	MAIN C. B. A.		[SUPPLIED FROM MBV]
				(RTL) NV-FJ610B-S/B-K
				NV-FJ611B-K
C0701	ECUM1C105ZFN	C. CAPACITOR CH 16V 1U	1	
C0702	ECUX1H102KBV	C. CAPACITOR CH 50V 1000P	1	
C0703	ECUM1A105KBN	C. CAPACITOR CH 10V 1U	1	
C0704	ECUM1E333KBN	C. CAPACITOR CH 25V 0. 033U	1	
C0706	ECEA1HKA010	E. CAPACITOR 50V 1U	1	
C0707	ECEA1HKA2R2	E. CAPACITOR 50V 2. 2U	1	
C0708	ECEA1HKAR47	E. CAPACITOR 50V 0. 47U	1	
C0710	ECUX1H103ZFV	C. CAPACITOR CH 50V 0. 01U	1	
C0711	ECEA1CKA220	E. CAPACITOR 16V 22U	1	
C0712	ECUX1C104ZFV	C. CAPACITOR CH 16V 0. 1U	1	
C0713	EEUFA1A391	E. CAPACITOR 10V 390U	1	
C0714	ECUM1C105ZFN	C. CAPACITOR CH 16V 1U	1	
C0715	ECUX1H030CCV	C. CAPACITOR CH 50V 3P	1	
C0716	ECUX1H123KBV	C. CAPACITOR CH 50V 0. 012U	1	
C0717	ECUM1H330GUV	C. CAPACITOR CH 50V 33P	1	
C0719	ECUX1E104ZFV	C. CAPACITOR CH 25V 0. 1U	1	
C0721	ECUX1H820JCV	C. CAPACITOR CH 50V 82P	1	
C0724	ECUX1H331KBV	C. CAPACITOR CH 50V 330P	1	
C1001	ECEA1AKG220	E. CAPACITOR 10V 22U	1	[SUPPLIED FROM MBV]
C1002	ECUM1H103ZFN	C. CAPACITOR CH 50V 0. 01U	1	
C1003	ECEA1CGE470	E. CAPACITOR 16V 47U	1	
C1004	ECUM1H103ZFN	C. CAPACITOR CH 50V 0. 01U	1	
C1005	ECEA1AKA470	E. CAPACITOR 10V 47U	1	
C1006, 07	ECUM1H103ZFN	C. CAPACITOR CH 50V 0. 01U	2	
C1008	ECA1CAK470X	E. CAPACITOR 16V 47U	1	
C1009	ECEA0JKA470	E. CAPACITOR 6. 3V 47U	1	
C1010	ECEA1CGE470	E. CAPACITOR 16V 47U	1	
C1011, 12	ECEA1CKA100	E. CAPACITOR 16V 10U	2	
C1015	ECUM1H102KBN	C. CAPACITOR CH 50V 1000P	1	
C1016	ECA1CAK100X	E. CAPACITOR 16V 10U	1	
C1017	ECEA1HKA4R7	E. CAPACITOR 50V 4. 7U	1	
C1201	ECEA0JKA101	E. CAPACITOR 6. 3V 100U	1	
C1202	ECUM1H103ZFN	C. CAPACITOR CH 50V 0. 01U	1	
C1203	ECEA1AKA220	E. CAPACITOR 10V 22U	1	
C1204	ECUM1H103ZFN	C. CAPACITOR CH 50V 0. 01U	1	
C1205	ECEA0JKA470	E. CAPACITOR 6. 3V 47U	1	
C1206, 07	ECUM1E104KBN	C. CAPACITOR CH 25V 0. 1U	2	
C1208	ECUM1H103ZFN	C. CAPACITOR CH 50V 0. 01U	1	
C1501	ECUM1H221JCN	C. CAPACITOR CH 50V 220P	1	
C2501	ECUM1C474ZFN	C. CAPACITOR CH 16V 0. 47U	1	
C2502	ECEA1VKN4R7	E. CAPACITOR 35V 4. 7U	1	
C2503	ECUM1H563ZFN	C. CAPACITOR CH 50V 0. 056U	1	
C2504	ECEA1EKA470	E. CAPACITOR 25V 47U	1	
C2505	ECUM1H330JCN	C. CAPACITOR CH 50V 33P	1	
C2506	ECEA0JKN220	E. CAPACITOR 6. 3V 22U	1	
C2507	ECUM1H104ZFN	C. CAPACITOR CH 50V 0. 1U	1	
C2508	ECEA1EKA4R7	E. CAPACITOR 25V 4. 7U	1	
C2509, 10	ECUM1H563ZFN	C. CAPACITOR CH 50V 0. 056U	2	
C2511	ECEA1VKN4R7	E. CAPACITOR 35V 4. 7U	1	
C2512	ECUM1H392KBN	C. CAPACITOR CH 50V 3900P	1	
C2516	ECEA0JKA221	E. CAPACITOR 6. 3V 220U	1	
C2518	ECUM1H473ZFN	C. CAPACITOR CH 50V 0. 047U	1	
C2521	ECEA1EKA470	E. CAPACITOR 25V 47U	1	

Ref.No.	Part No.	Part Name & Description	Pcs	Remarks
C2522	ECUM1E683KBN	C.CAPACITOR CH 25V 0.068U	1	
C2523-25	ECUM1C154KBN	C.CAPACITOR CH 16V 0.15U	3	
C2526	ECEA1VKN4R7	E.CAPACITOR 35V 4.7U	1	
C2535,36	ECUM1H104ZFN	C.CAPACITOR CH 50V 0.1U	2	
C3002,03	ECUM1H102KBN	C.CAPACITOR CH 50V 1000P	2	
C3004	ECEA1HKA010	E.CAPACITOR 50V 1U	1	
C3005	ECUM1H680JCN	C.CAPACITOR CH 50V 68P	1	
C3006	ECUM1H060DCN	C.CAPACITOR CH 50V 6P	1	
C3007	ECUM1E104KBN	C.CAPACITOR CH 25V 0.1U	1	
C3008	ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	
C3011	ECEA0JKA221	E.CAPACITOR 6.3V 220U	1	
C3012,13	ECUM1H104ZFN	C.CAPACITOR CH 50V 0.1U	2	
C3014	ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	
C3015	ECEA1HKA010	E.CAPACITOR 50V 1U	1	
C3016	ECUM1H333KBN	C.CAPACITOR CH 50V 0.033U	1	
C3017	ECUM1H104ZFN	C.CAPACITOR CH 50V 0.1U	1	
C3018	ECEA0JKA101	E.CAPACITOR 6.3V 100U	1	
C3019	ECUM1E104KBN	C.CAPACITOR CH 25V 0.1U	1	
C3020	ECUM1H222KBN	C.CAPACITOR CH 50V 2200P	1	
C3021	ERJ6GMZ0R00	M.RESISTOR CH 1/10W 0	1	
C3024	ECEA0JKA470	E.CAPACITOR 6.3V 47U	1	
C3025	ECEA0JKA101	E.CAPACITOR 6.3V 100U	1	
C3026	ECUM1H104ZFN	C.CAPACITOR CH 50V 0.1U	1	
C3029	ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	
C3030	ECUM1H222KBN	C.CAPACITOR CH 50V 2200P	1	
C3031	ECEA1HKAR47	E.CAPACITOR 50V 0.47U	1	
C3033	ECEA1EKN4R7	E.CAPACITOR 25V 4.7U	1	
C3034	ECEA1EKA4R7	E.CAPACITOR 25V 4.7U	1	
C3035	ECUM1H104ZFN	C.CAPACITOR CH 50V 0.1U	1	
C3036	ECEA0JKA221	E.CAPACITOR 6.3V 220U	1	
C3037	ECUM1H104ZFN	C.CAPACITOR CH 50V 0.1U	1	
C3038	ECEA0JKA101	E.CAPACITOR 6.3V 100U	1	
C3039	ECEA0JKA220	E.CAPACITOR 6.3V 22U	1	
C3040	ECUM1H223KBN	C.CAPACITOR CH 50V 0.022U	1	
C3041	ECEA1CKA100	E.CAPACITOR 16V 10U	1	
C3042	ECUM1H560JCN	C.CAPACITOR CH 50V 56P	1	
C3043	ECUM1H104ZFN	C.CAPACITOR CH 50V 0.1U	1	
C3044	ECUM1H821JCN	C.CAPACITOR CH 50V 820P	1	
C3045	ECUM1H221JCN	C.CAPACITOR CH 50V 220P	1	
C3046	ECUM1H220JCN	C.CAPACITOR CH 50V 22P	1	
C3047	ECEA0JKA220	E.CAPACITOR 6.3V 22U	1	
C3048	ECUM1H560JCN	C.CAPACITOR CH 50V 56P	1	
C3049	ECUM1H681JCN	C.CAPACITOR CH 50V 680P	1	
C3050	ECUM1H680JCN	C.CAPACITOR CH 50V 68P	1	
C3051	ECUM1H220JCN	C.CAPACITOR CH 50V 22P	1	
C3052,53	ECUM1H104ZFN	C.CAPACITOR CH 50V 0.1U	2	
C3054,55	ECUM1E104KBN	C.CAPACITOR CH 25V 0.1U	2	
C3502	ECUM1H103KBN	C.CAPACITOR CH 50V 0.01U	1	
C3504	ECUM1H103KBN	C.CAPACITOR CH 50V 0.01U	1	
C3505	ECEA0JKS470	E.CAPACITOR 6.3V 47U	1	
C3506	ECUM1H103KBN	C.CAPACITOR CH 50V 0.01U	1	
C3507-10	ECUM1E104KBN	C.CAPACITOR CH 25V 0.1U	4	
C4001	ECEA1HKN010	E.CAPACITOR 50V 1U	1	
C4002	ECQB1H822JF	P.CAPACITOR 50V 8200P	1	
C4003	ECEA1HKA010	E.CAPACITOR 50V 1U	1	
C4004	ECEA1EKA4R7	E.CAPACITOR 25V 4.7U	1	
C4005	ECUM1H272KBN	C.CAPACITOR CH 50V 2700P	1	
C4006	ECEA0JKA220	E.CAPACITOR 6.3V 22U	1	
C4007	ECUM1H122JCN	C.CAPACITOR CH 50V 1200P	1	[SUPPLIED FROM MBV]
C4010,11	ECUM1H153KBN	C.CAPACITOR CH 50V 0.015U	2	
C4012	ECEA1HKA010	E.CAPACITOR 50V 1U	1	
C4013	ECEA0JKA470	E.CAPACITOR 6.3V 47U	1	
C4014	ECEA1HKA0R1	E.CAPACITOR 50V 0.1U	1	
C4015	ECEA0JKA220	E.CAPACITOR 6.3V 22U	1	
C4016	ECEA1HKA0R1	E.CAPACITOR 50V 0.1U	1	
C4018	ECUM1H104ZFN	C.CAPACITOR CH 50V 0.1U	1	
C4019	ECEA0JKA470	E.CAPACITOR 6.3V 47U	1	
C4045	ECUM1H103KBN	C.CAPACITOR CH 50V 0.01U	1	
C4046-48	ECA1CAK100X	E.CAPACITOR 16V 10U	3	
C4068	ECQB1H223JF	P.CAPACITOR 50V 0.022U	1	
C4070	ECUM1H221JCN	C.CAPACITOR CH 50V 220P	1	
C4072	ECEA0JKA221	E.CAPACITOR 6.3V 220U	1	
C4073	ECUM1H223KBN	C.CAPACITOR CH 50V 0.022U	1	
C4074	ECUM1H152JCN	C.CAPACITOR CH 50V 1500P	1	
C4075	ECEA1AKA220	E.CAPACITOR 10V 22U	1	

Ref.No.	Part No.	Part Name & Description	Pcs	Remarks
C4501,02	ECEA1HKNR47	E.CAPACITOR 50V 0.47U	2	
C4505-08	ECA1HAKR22X	E.CAPACITOR 50V 0.22U	4	[SUPPLIED FROM MBV]
C4511,12	ECEA1CKA100	E.CAPACITOR 16V 10U	2	
C4513-16	ECA1CAK100X	E.CAPACITOR 16V 10U	4	
C4517	ECEA1CKA100	E.CAPACITOR 16V 10U	1	
C4518	ECEA1HKAR22	E.CAPACITOR 50V 0.22U	1	
C4519	ECA1CAK100X	E.CAPACITOR 16V 10U	1	
C4520	ECQB1H562JF	P.CAPACITOR 50V 5600P	1	
C4521	ECA1CAK470X	E.CAPACITOR 16V 47U	1	
C4522	ECA1CAK100X	E.CAPACITOR 16V 10U	1	
C4523	ECA1HAK2R2X	E.CAPACITOR 50V 2.2U	1	[SUPPLIED FROM MBV]
C4524	ECA1CAK100X	E.CAPACITOR 16V 10U	1	
C4525	ECA1CAK470X	E.CAPACITOR 16V 47U	1	
C4526	ECQB1H562JF	P.CAPACITOR 50V 5600P	1	
C4527	ECA1CAK100X	E.CAPACITOR 16V 10U	1	
C4528	ECUM1H104ZFN	C.CAPACITOR CH 50V 0.1U	1	
C4529	ECEA1CKS470	E.CAPACITOR 16V 47U	1	
C4530	ECUM1E104KBN	C.CAPACITOR CH 25V 0.1U	1	
C4531	ECUM1H103KBN	C.CAPACITOR CH 50V 0.01U	1	
C4532	ECUM1H561JCN	C.CAPACITOR CH 50V 560P	1	
C4533	ECUM1H104ZFN	C.CAPACITOR CH 50V 0.1U	1	
C4534	ECEA0JKS331	E.CAPACITOR 6.3V 330U	1	
C4535	ECUM1H471JCN	C.CAPACITOR CH 50V 470P	1	
C4540	ECUM1H102KBN	C.CAPACITOR CH 50V 1000P	1	
C4901,02	ECUM1H470JCN	C.CAPACITOR CH 50V 47P	2	
C4903-09	ECUM1H471KBN	C.CAPACITOR CH 50V 470P	7	
C4912,13	ECUM1H470JCN	C.CAPACITOR CH 50V 47P	2	
C4914	ECUM1H471KBN	C.CAPACITOR CH 50V 470P	1	
C4917	ECUM1E104KBN	C.CAPACITOR CH 25V 0.1U	1	
C4921	ECUM1E104KBN	C.CAPACITOR CH 25V 0.1U	1	
C4922	ECEA1CKA470	E.CAPACITOR 16V 47U	1	
C4923	ECUM1E104KBN	C.CAPACITOR CH 25V 0.1U	1	
C4925	ECUM1H104ZFN	C.CAPACITOR CH 50V 0.1U	1	
C4926	ECEA1CKA470	E.CAPACITOR 16V 47U	1	
C4927	ECUM1H104ZFN	C.CAPACITOR CH 50V 0.1U	1	
C4928	ECEA0JKA331	E.CAPACITOR 6.3V 330U	1	
C4929	ECUM1H104ZFN	C.CAPACITOR CH 50V 0.1U	1	
C4932	ECUM1H104ZFN	C.CAPACITOR CH 50V 0.1U	1	
C4933	ECEA1CKA470	E.CAPACITOR 16V 47U	1	
C4935	ECUM1H222KBN	C.CAPACITOR CH 50V 2200P	1	
C4938	ECUM1H222KBN	C.CAPACITOR CH 50V 2200P	1	
C4939	ECUM1H104ZFN	C.CAPACITOR CH 50V 0.1U	1	
C4940	ECEA0JKA331	E.CAPACITOR 6.3V 330U	1	
C4941	ECUM1E104KBN	C.CAPACITOR CH 25V 0.1U	1	
C6001	ECEA0JKA470	E.CAPACITOR 6.3V 47U	1	
C6002	ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	
C6003	ECUM1H200JCN	C.CAPACITOR CH 50V 20P	1	
C6004	ECUM1H120JCN	C.CAPACITOR CH 50V 12P	1	
C6005	ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	
C6006	ECUM1H471JCN	C.CAPACITOR CH 50V 470P	1	
C6007,08	ECUM1H121JCN	C.CAPACITOR CH 50V 120P	2	
C6009	ECUM1H681JCN	C.CAPACITOR CH 50V 680P	1	
C6010	ECUM1H104ZFN	C.CAPACITOR CH 50V 0.1U	1	
C6011	ECEA0JKA470	E.CAPACITOR 6.3V 47U	1	
C6012	ECUM1H102KBN	C.CAPACITOR CH 50V 1000P	1	
C6013	ECUM1H180JCN	C.CAPACITOR CH 50V 18P	1	
C6016	ECUM1H180JCN	C.CAPACITOR CH 50V 18P	1	
C6017	ECEA1CKA100	E.CAPACITOR 16V 10U	1	
C6018	ECUM1H102KBN	C.CAPACITOR CH 50V 1000P	1	
C6019	ECUM1H151JCN	C.CAPACITOR CH 50V 150P	1	
C6022	ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	
C7302	VCEA0JAW101	E.CAPACITOR 6.3V 100U	1	
C7303	ECUX1H103ZFV	C.CAPACITOR CH 50V 0.01U	1	
C7304	VCEA0JAW101	E.CAPACITOR 6.3V 100U	1	
C7305,06	ECUX1H330JCV	C.CAPACITOR CH 50V 33P	2	
C7307	ECUX1H103ZFV	C.CAPACITOR CH 50V 0.01U	1	
C7308	ECEA1HKA2R2	E.CAPACITOR 50V 2.2U	1	
C7311	ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	1	
C7312,13	ECUX1C104ZFV	C.CAPACITOR CH 16V 0.1U	2	
C7315	ECUM1E104KBN	C.CAPACITOR CH 25V 0.1U	1	
C7316	ECUX1C104ZFV	C.CAPACITOR CH 16V 0.1U	1	
C7317	VCEA1CAW100	E.CAPACITOR 16V 10U	1	
C7318	VCEA0JAW470	E.CAPACITOR 6.3V 47U	1	
C7319,20	VCEA1CAW100	E.CAPACITOR 16V 10U	2	
C7324,25	ECUX1C104ZFV	C.CAPACITOR CH 16V 0.1U	2	

Ref. No.	Part No.	Part Name & Description	Pcs	Remarks
C7341, 42	ECUX1H472KBV	C. CAPACITOR CH 50V 4700P	2	
C7501	ECUM1H103ZFN	C. CAPACITOR CH 50V 0. 01U	1	
C7502	ECEA1HKA100	E. CAPACITOR 50V 10U	1	
C7503	ECUM1H120JCN	C. CAPACITOR CH 50V 12P	1	
C7504	ECEA0JKA101	E. CAPACITOR 6. 3V 100U	1	
C7505	ECUM1H104ZFN	C. CAPACITOR CH 50V 0. 1U	1	
C7506	VCE0073	SUPER CAPACITOR	1	
C7507	ECEA0JKA221	E. CAPACITOR 6. 3V 220U	1	
C7508	ECUM1H683ZFN	C. CAPACITOR CH 50V 0. 068U	1	
C7509	ECUM1H103ZFN	C. CAPACITOR CH 50V 0. 01U	1	
C7601	ECEA0JKA101	E. CAPACITOR 6. 3V 100U	1	
C7602	ECUM1H221JCN	C. CAPACITOR CH 50V 220P	1	
C7603	ECEA0JKA101	E. CAPACITOR 6. 3V 100U	1	
C7605, 06	ECUM1H330JCN	C. CAPACITOR CH 50V 33P	2	
C7607	ECEA0JKA101	E. CAPACITOR 6. 3V 100U	1	
C7608	ECUM1H103ZFN	C. CAPACITOR CH 50V 0. 01U	1	
C7610	ECEA1HKA100	E. CAPACITOR 50V 10U	1	
C7611	ECUM1H104ZFN	C. CAPACITOR CH 50V 0. 1U	1	
C7612	ECUM1H221JCN	C. CAPACITOR CH 50V 220P	1	
C7613	ERJ6GMZ0R00	M. RESISTOR CH 1/10W 0	1	
C7615	ECQV1H104JM	P. CAPACITOR 50V 0. 1U	1	
C7618	ECUM1E104KBN	C. CAPACITOR CH 25V 0. 1U	1	
C7619	ECUM1H104ZFN	C. CAPACITOR CH 50V 0. 1U	1	
C7620, 21	ECA1HAK2R2X	E. CAPACITOR 50V 2. 2U	2	[SUPPLIED FROM MBV]
C7623	ECUM1H330JCN	C. CAPACITOR CH 50V 33P	1	
C7701, 02	ECUM1H104ZFN	C. CAPACITOR CH 50V 0. 1U	2	
C7705	ECUM1H104ZFN	C. CAPACITOR CH 50V 0. 1U	1	
C7708	ECUM1H104ZFN	C. CAPACITOR CH 50V 0. 1U	1	
C7709	ECEA0JKA470	E. CAPACITOR 6. 3V 47U	1	
C7711	ECUM1C105ZFN	C. CAPACITOR CH 16V 1U	1	
C7712, 13	ECUM1H103ZFN	C. CAPACITOR CH 50V 0. 01U	2	
C7714	ECUM1H470JCN	C. CAPACITOR CH 50V 47P	1	
C7715	ECUM1C105ZFN	C. CAPACITOR CH 16V 1U	1	
C7716	ECUM1H471JCN	C. CAPACITOR CH 50V 470P	1	
C7717	ECUM1C105ZFN	C. CAPACITOR CH 16V 1U	1	
C7718	ECUM1H471JCN	C. CAPACITOR CH 50V 470P	1	
C7720	ECEA0JKA470	E. CAPACITOR 6. 3V 47U	1	
C7721	ECEA1EKA4R7	E. CAPACITOR 25V 4. 7U	1	
C7722, 23	ECUM1H104ZFN	C. CAPACITOR CH 50V 0. 1U	2	
C7728	ECEA1EKA4R7	E. CAPACITOR 25V 4. 7U	1	
C7729	ECUM1H104ZFN	C. CAPACITOR CH 50V 0. 1U	1	
C7730	ECEA0JKA101	E. CAPACITOR 6. 3V 100U	1	
C7731	ECUM1H820JCN	C. CAPACITOR CH 50V 82P	1	
C7735, 36	ECUM1H104ZFN	C. CAPACITOR CH 50V 0. 1U	2	
C7739	ECUM1H104ZFN	C. CAPACITOR CH 50V 0. 1U	1	
C7740	ECEA0JKA470	E. CAPACITOR 6. 3V 47U	1	
C7742	ECUM1H104ZFN	C. CAPACITOR CH 50V 0. 1U	1	
C7749, 50	ECUM1H270JCN	C. CAPACITOR CH 50V 27P	2	
C7752	ECEA0JKA470	E. CAPACITOR 6. 3V 47U	1	
C7802	ECEA0JKA470	E. CAPACITOR 6. 3V 47U	1	
C7803	ECUM1C105ZFN	C. CAPACITOR CH 16V 1U	1	
C7804	ECUM1H221JCN	C. CAPACITOR CH 50V 220P	1	
D0702	MA77	DIODE	1	
D1003	1SS254	DIODE	1	
D1004	MA4051N-H	DIODE	1	
D1006	MA4051N-L	DIODE	1	
D1009	MA4051N-M	DIODE	1	
D1010	1SS254	DIODE	1	
D1015, 16	1SS254	DIODE	2	
D1017	MA4120N-M	DIODE	1	[SUPPLIED FROM MBV]
D1018	1SS254	DIODE	1	
D1501	SIR505S	DIODE	1	
D2501, 02	1SS254	DIODE	2	
D3001	1SS254	DIODE	1	
D4905, 06	MA4075-M	DIODE	2	
D6002, 03	MA700	DIODE	2	
D7501	MA4220N-M	DIODE	1	[SUPPLIED FROM MBV]
D7503	RB441P	DIODE	1	
D7601	MA4300M	DIODE	1	
D7603, 04	1SS254	DIODE	2	
DP7501	VSL0533-B	FIP	1	[SUPPLIED FROM MBV]
FL7301	VLF0633	FILTER	1	

Ref. No.	Part No.	Part Name & Description	Pcs	Remarks
IC0701	LA75503	IC	1	[SUPPLIED FROM MBV]
IC1001	PQ20VB2E	IC	1	[SUPPLIED FROM MBV]
IC1201	UPC1093J	IC	1	[SUPPLIED FROM MBV]
IC1501, 02	RPI354N	IC	2	[SUPPLIED FROM MBV]
IC2502	AN3811NK	IC	1	[SUPPLIED FROM MBV]
IC3001	TDA9735HV3	IC	1	[SUPPLIED FROM MBV]
IC3501	AN3368SB	IC	1	[SUPPLIED FROM MBV]
IC4001	NJM4558M	IC	1	
IC4501	TDA9605H	IC	1	[SUPPLIED FROM MBV]
IC4901	LA73021M	IC	1	
IC6001	M3777AVCEZ	IC	1	[SUPPLIED FROM MBV]
IC7301	TDA9874AH	IC	1	[SUPPLIED FROM MBV]
IC7302	PST7043	IC	1	
IC7501	M35502AFP	IC	1	
IC7502	S80743AL	IC	1	
IC7503	PNA4611M02VT	IR RECEIVER UNIT	1	[SUPPLIED FROM MBV]
IC7504	RN5VD28AA	IC	1	[SUPPLIED FROM MBV]
IC7701	M3506SWVAX	IC	1	[SUPPLIED FROM MBV]
IC7703	M3062SVCEY	IC	1	[SUPPLIED FROM MBV]
IC7704	M24C16-WBN6	IC	1	[SUPPLIED FROM MBV]
⚠ IP1001, 02	UNH000300A	IC PROTECTOR	2	
⚠ IP1201, 02	UNH000300A	IC PROTECTOR	2	
JK4901	VJJ0377	RCA JACK	1	[SUPPLIED FROM MBV]
JK4903	VJS3634	21-PIN SCART JACK	1	[SUPPLIED FROM MBV]
K0703	ERJ3GEY0R00	M. RESISTOR CH 1/16W 0	1	
K0707	ERJ3GEY0R00	M. RESISTOR CH 1/16W 0	1	
K0709	ERJ3GEY0R00	M. RESISTOR CH 1/16W 0	1	
K2501	ERJ6GMZ0R00	M. RESISTOR CH 1/10W 0	1	
K2503	ERJ6GMZ0R00	M. RESISTOR CH 1/10W 0	1	
K3003	ERJ6GMZ0R00	M. RESISTOR CH 1/10W 0	1	
K7301-03	ERJ6GEY0R00	M. RESISTOR CH 1/10W 0	3	
K7603	ERJ6GMZ0R00	M. RESISTOR CH 1/10W 0	1	
L0701	ELJNAR22JF	CHIP INDUCTOR	1	[SUPPLIED FROM MBV]
L0703	ELJNA1R8JF	CHIP INDUCTOR	1	[SUPPLIED FROM MBV]
L2503	VLQ0599J680	COIL 68UH	1	
L3001	VLQ0599J220	COIL 22UH	1	
L3003	VLQ0599J470	COIL 47UH	1	
L3004	VLQ0599J680	COIL 68UH	1	
L3005, 06	VLQ0599J101	COIL 100UH	2	
L3007	VLQ0599J330	COIL 33UH	1	
L3008	VLQ0599J470	COIL 47UH	1	
L3009	VLQ0599J390	COIL 39UH	1	
L3010	VLQ0599J560	COIL 56UH	1	
L3501	VLQ0599J330	COIL 33UH	1	
L4001	ELELN153JA	INDUCTOR 15000UH	1	[SUPPLIED FROM MBV]
L4007	VLQ0599J680	COIL 68UH	1	
L4501	VLQ0599J100	COIL 10UH	1	
L4901	VLQ0599JR22	COIL 0. 22UH	1	[SUPPLIED FROM MBV]
L4902-04	VLQ0599J680	COIL 68UH	3	
L6001	VLQ0599J101	COIL 100UH	1	
L6002	VLQ0599J2R2	COIL 2. 2UH	1	
L7302	VLQ0599J1R0	COIL 1UH	1	
L7601-04	VLQ0599J330	COIL 33UH	4	
L7605	VLQ0599J100	COIL 10UH	1	
L7608	VLQ0599J1R0	COIL 1UH	1	
L7609	VLQ0599J100	COIL 10UH	1	
L7701, 02	VLQ0599J390	COIL 39UH	2	
L7704	VLQ0599J390	COIL 39UH	1	
L7706	VLQ0599J100	COIL 10UH	1	
L7707	VLQ0599J220	COIL 22UH	1	
L7801	VLQ0599J680	COIL 68UH	1	
LB3001, 02	ERJ6GMZ0R00	M. RESISTOR CH 1/10W 0	2	
LB3501-04	VLP0145	COIL	4	
LB4901-04	ERJ6GMYJ221	M. RESISTOR CH 1/10W 220	4	
LB4906, 07	ERJ6GMYJ221	M. RESISTOR CH 1/10W 220	2	
LB7301	ERJ6GEY0R00	M. RESISTOR CH 1/10W 0	1	
LB7303	ERJ6GEY0R00	M. RESISTOR CH 1/10W 0	1	
P1001	VJS3917A016W	CONNECTOR (FEMALE) 16P	1	

Ref. No.	Part No.	Part Name & Description	Pcs	Remarks
P1501	VJS3837A002	CONNECTOR (FEMALE) 2P	1	
P2501	VJP3835A012	CONNECTOR (MALE) 12P	1	
P2502	VJS3537A009G	CONNECTOR (FEMALE) 9P	1	
P3502	VJS3537A010G	CONNECTOR (FEMALE) 10P	1	
P4002	VJS3837A002	CONNECTOR (FEMALE) 2P	1	
P4003	VJS3537A006G	CONNECTOR (FEMALE) 6P	1	
PK0701	VJR0826E009W	CONNECTOR (MALE) 9P	1	
PK7301P	VJR0777B007W	CONNECTOR (MALE) 7P	1	
PK7302	VJR0777B006W	CONNECTOR (MALE) 6P	1	
PP0701	VJP3589A004B	CONNECTOR (MALE) 4P	1	
Q0702	2SD601A-S	TRANSISTOR	1	
Q1001	2SD601A	TRANSISTOR	1	
Q1002	2SD602A	TRANSISTOR	1	
Q1003	2SD1996-S	TRANSISTOR	1	
Q1004	2SB710A	TRANSISTOR	1	
Q1005,06	2SD1996-S	TRANSISTOR	2	
Q1007	2SD602A-R	TRANSISTOR	1	
Q1009	2SD1996-S	TRANSISTOR	1	
Q1010	2SD601A	TRANSISTOR	1	
Q1201,02	2SD1996-S	TRANSISTOR	2	
Q1501	PNB2301MBV	TRANSISTOR	1	
Q1502	PNB2301MAV	TRANSISTOR	1	
Q3003	2SB709A	TRANSISTOR	1	
Q4001	2SD1149	TRANSISTOR	1	
Q4002	2SD601A	TRANSISTOR	1	
Q4006	2SB710A-R	TRANSISTOR	1	
Q4007	2SD602A-R	TRANSISTOR	1	
Q4901	2SB709A	TRANSISTOR	1	
Q4903,04	2SD601A	TRANSISTOR	2	
Q4905	2SD1328-S	TRANSISTOR	1	
Q7601	2SD601A	TRANSISTOR	1	
Q7604	2SD601A	TRANSISTOR	1	
Q7605	2SB709A	TRANSISTOR	1	
Q7606	2SD601A	TRANSISTOR	1	
Q7701	2SD601A	TRANSISTOR	1	
Q7702	2SB709A	TRANSISTOR	1	
Q7703	2SD601A	TRANSISTOR	1	
Q7709	2SB709A	TRANSISTOR	1	
Q7802	2SD601A	TRANSISTOR	1	
QR1001	MUN2112	TRANSISTOR-RESISTOR	1	
QR1002	MUN2211	TRANSISTOR-RESISTOR	1	
QR1003	MUN2212	TRANSISTOR-RESISTOR	1	
QR3006,07	MUN2212	TRANSISTOR-RESISTOR	2	
QR4001	UN2217	TRANSISTOR-RESISTOR	1	
QR4002	MUN2113	TRANSISTOR-RESISTOR	1	
QR4004	MUN2212	TRANSISTOR-RESISTOR	1	
QR4006	MUN2111	TRANSISTOR-RESISTOR	1	
QR4502-05	UN2215	TRANSISTOR	4	
QR4506	MUN2113	TRANSISTOR-RESISTOR	1	
QR4903	MUN2212	TRANSISTOR-RESISTOR	1	
QR6002	MUN2211	TRANSISTOR-RESISTOR	1	
QR6003,04	MUN2212	TRANSISTOR-RESISTOR	2	
QR6005	MUN2211	TRANSISTOR-RESISTOR	1	
QR6006	MUN2213	TRANSISTOR-RESISTOR	1	
QR6007	MUN2113	TRANSISTOR-RESISTOR	1	
R0701	ERJ6GEYJ104	M.RESISTOR CH 1/10W 100K	1	
R0705	ERJ3GEYJ362	M.RESISTOR CH 1/16W 3.6K	1	
R0707	ERJ3GEYJ393	M.RESISTOR CH 1/16W 39K	1	
R0708	ERJ3GEYJ103	M.RESISTOR CH 1/16W 10K	1	
R0711	ERJ3GEYJ181	M.RESISTOR CH 1/16W 180	1	
R0713	ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	1	
R0715	ERJ3GEYJ223	M.RESISTOR CH 1/16W 22K	1	
R0717	ERJ3GEYJ152	M.RESISTOR CH 1/16W 1.5K	1	
R0719	ERJ3GEYJ472	M.RESISTOR CH 1/16W 4.7K	1	
R0725	ERJ6GEYJ101	M.RESISTOR CH 1/10W 100	1	
R0726	ERJ3GEYJ683	M.RESISTOR CH 1/16W 68K	1	
R0727,28	ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	2	
R0729	ERJ3GEYJ103	M.RESISTOR CH 1/16W 10K	1	
R0740	ERJ3GEYG471	M.RESISTOR CH 1/16W 470	1	
R0741	ERJ3GEYJ221	M.RESISTOR CH 1/16W 220	1	

Ref. No.	Part No.	Part Name & Description	Pcs	Remarks
R0742	ERJ8GEYJ151	M.RESISTOR CH 1/8W 150	1	
R0745	ERJ6GEYJ335	M.RESISTOR CH 1/10W 3.3M	1	
R1001,02	ERJ6GMYJ333	M.RESISTOR CH 1/10W 33K	2	
R1003,04	ERJ6GMYJ562	M.RESISTOR CH 1/10W 5.6K	2	
R1005	ERDS2TJ182	C.RESISTOR 1/4W 1.8K	1	
R1006	ERJ6GMYJ472	M.RESISTOR CH 1/10W 4.7K	1	
R1008	ERDS2TJ682	C.RESISTOR 1/4W 6.8K	1	
R1009,10	ERJ6GMYJ103	M.RESISTOR CH 1/10W 10K	2	
R1011	ERJ6GMYG823	M.RESISTOR CH 1/10W 82K	1	
R1012	ERDS2TJ272	C.RESISTOR 1/4W 2.7K	1	
R1013	ERJ6GMYG153	M.RESISTOR CH 1/10W 15K	1	
R1014	ERJ6GMYG163	M.RESISTOR CH 1/10W 16K	1	
R1015	ERJ6GMYG123	M.RESISTOR CH 1/10W 12K	1	
R1016,17	ERJ6GMYJ563	M.RESISTOR CH 1/10W 56K	2	
R1018,19	ERJ6GMYJ683	M.RESISTOR CH 1/10W 68K	2	
R1022	ERJ6GMYJ103	M.RESISTOR CH 1/10W 10K	1	
R1023	ERJ6GMYJ123	M.RESISTOR CH 1/10W 12K	1	
R1024	ERJ6GMYJ103	M.RESISTOR CH 1/10W 10K	1	
R1026	ERJ6GMYJ152	M.RESISTOR CH 1/10W 1.5K	1	
R1027	ERDS2TJ123	C.RESISTOR 1/4W 12K	1	
R1028	ERJ6GMYJ102	M.RESISTOR CH 1/10W 1K	1	
R1029	ERJ6GMYG562	M.RESISTOR CH 1/10W 5.6K	1	
R1030	ERJ6GMYG622	M.RESISTOR CH 1/10W 6.2K	1	
R1201,02	ERJ6GMYG272	M.RESISTOR CH 1/10W 2.7K	2	
R1203	ERJ6GMYJ623	M.RESISTOR CH 1/10W 6.2K	1	
R1204	ERDS2TJ102	C.RESISTOR 1/4W 1K	1	
R1501	ERJ6GMYJ101	M.RESISTOR CH 1/10W 100	1	
R1502	ERJ6GMYJ273	M.RESISTOR CH 1/10W 27K	1	
R1503	ERDS2TJ181	C.RESISTOR 1/4W 180	1	
R1504	ERJ6GMYJ273	M.RESISTOR CH 1/10W 27K	1	
R1505	ERDS2TJ121	C.RESISTOR 1/4W 120	1	
R2501	ERDS2TJ331	C.RESISTOR 1/4W 330	1	
R2502	ERJ6GMYG433	M.RESISTOR CH 1/10W 43K	1	
R2503	ERDS2TJ330	C.RESISTOR 1/4W 33	1	
R2504	ERJ6GMZ0R00	M.RESISTOR CH 1/10W 0	1	
R2505	ERJ6GMYJ103	M.RESISTOR CH 1/10W 10K	1	
R2506	ERJ6GMYJ102	M.RESISTOR CH 1/10W 1K	1	
R2507	ERJ6GMYJ392	M.RESISTOR CH 1/10W 3.9K	1	
R2508	ERDS2TJ330	C.RESISTOR 1/4W 33	1	
R2509	ERJ6GMYJ102	M.RESISTOR CH 1/10W 1K	1	
R2510	ERJ6GMYJ105	M.RESISTOR CH 1/10W 1M	1	
R2513	ERJ6GMYJ274	M.RESISTOR CH 1/10W 270	1	
R2514	ERJ6GMYJ103	M.RESISTOR CH 1/10W 10K	1	
R2517	ERDS1TJ1R2	C.RESISTOR 1/2W 1.2	1	
R2518	ERDS1TJ1R5	C.RESISTOR 1/2W 1.5	1	
R2519	ERDS2TJ330	C.RESISTOR 1/4W 33	1	
R3001	ERJ6GMYJ183	M.RESISTOR CH 1/10W 18K	1	
R3002	ERJ6GMYG301	M.RESISTOR CH 1/10W 300	1	
R3004	ERJ6GMYJ472	M.RESISTOR CH 1/10W 4.7K	1	
R3005	ERJ6GMZ0R00	M.RESISTOR CH 1/10W 0	1	
R3007	ERJ6GMZ0R00	M.RESISTOR CH 1/10W 0	1	
R3008	ERJ6GMYJ152	M.RESISTOR CH 1/10W 1.5K	1	
R3009	ERJ6GMYJ101	M.RESISTOR CH 1/10W 100	1	
R3010	ERJ6GMYJ473	M.RESISTOR CH 1/10W 47K	1	
R3011,12	ERJ6GMYJ101	M.RESISTOR CH 1/10W 100	2	
R3020	ERJ6GMZ0R00	M.RESISTOR CH 1/10W 0	1	
R3021	ERJ6GMYJ684	M.RESISTOR CH 1/10W 680K	1	
R3022	ERJ6GMYJ224	M.RESISTOR CH 1/10W 220K	1	
R3023	ERJ6GMYJ332	M.RESISTOR CH 1/10W 3.3K	1	
R3024	ERJ6GMYG271	M.RESISTOR CH 1/10W 270	1	
R3025	ERJ6GMYG102	M.RESISTOR CH 1/10W 1K	1	
R3026	ERJ6GMYG152	M.RESISTOR CH 1/10W 1.5K	1	
R3027	ERJ6GMYJ562	M.RESISTOR CH 1/10W 5.6K	1	
R3028	ERJ6GMYG152	M.RESISTOR CH 1/10W 1.5K	1	
R3029	ERJ6GMYG331	M.RESISTOR CH 1/10W 330	1	
R3030	ERJ6GMYJ123	M.RESISTOR CH 1/10W 12K	1	
R3031	ERJ6GMYJ225	M.RESISTOR CH 1/10W 2.2M	1	
R3032	ERJ6GMYG391	M.RESISTOR CH 1/10W 390	1	
R3033	ERJ6GMYG471	M.RESISTOR CH 1/10W 470	1	
R3034	ERJ6GMYG561	M.RESISTOR CH 1/10W 560	1	
R3035	ERJ6GMYG271	M.RESISTOR CH 1/10W 270	1	
R3036	ERJ6GMYJ272	M.RESISTOR CH 1/10W 2.7K	1	
R3040	ERJ6GMZ0R00	M.RESISTOR CH 1/10W 0	1	
R3505	ERJ6GMYJ101	M.RESISTOR CH 1/10W 100	1	
R4001	ERJ6GMYG334	M.RESISTOR CH 1/10W 330K	1	

Ref. No.	Part No.	Part Name & Description	Pcs	Remarks
R4002	ERJ6GMYG103	M. RESISTOR CH 1/10W 10K	1	
R4003	ERJ6GMYJ753	M. RESISTOR CH 1/10W 75K	1	
R4004	ERJ6GMYJ153	M. RESISTOR CH 1/10W 15K	1	
R4005	ERJ6GMYG241	M. RESISTOR CH 1/10W 240	1	
R4006	ERJ6GMYJ223	M. RESISTOR CH 1/10W 22K	1	
R4007	ERJ6GMYJ472	M. RESISTOR CH 1/10W 4. 7K	1	
R4008	ERJ6GMYJ222	M. RESISTOR CH 1/10W 2. 2K	1	
R4009	ERJ6GMYJ181	M. RESISTOR CH 1/10W 180	1	
R4010	ERJ6GMYJ391	M. RESISTOR CH 1/10W 390	1	
R4011	ERJ6GMYJ392	M. RESISTOR CH 1/10W 3. 9K	1	
R4012	ERJ6GMZ0R00	M. RESISTOR CH 1/10W 0	1	
R4014	ERJ6GMYK225	M. RESISTOR CH 1/10W 2. 2M	1	
R4015	ERJ6GMYJ272	M. RESISTOR CH 1/10W 2. 7K	1	
R4016	ERJ6GMYJ182	M. RESISTOR CH 1/10W 1. 8K	1	
R4019	ERJ6GMYJ101	M. RESISTOR CH 1/10W 100	1	
R4036	ERJ6GMYJ682	M. RESISTOR CH 1/10W 6. 8K	1	
R4037	ERJ6GMYJ222	M. RESISTOR CH 1/10W 2. 2K	1	
R4038, 39	ERJ6GMYJ154	M. RESISTOR CH 1/10W 150K	2	
R4049	ERJ6GMYJ473	M. RESISTOR CH 1/10W 47K	1	
R4060	ERJ6GMYJ822	M. RESISTOR CH 1/10W 8. 2K	1	
R4061	ERJ6GMYJ332	M. RESISTOR CH 1/10W 3. 3K	1	
R4062	ERJ6GMYJ272	M. RESISTOR CH 1/10W 2. 7K	1	
R4063	ERJ6GMYJ332	M. RESISTOR CH 1/10W 3. 3K	1	
R4067	ERJ6GMYJ682	M. RESISTOR CH 1/10W 6. 8K	1	
R4068	ERJ6GMYJ222	M. RESISTOR CH 1/10W 2. 2K	1	
R4069, 70	ERJ6GMYJ154	M. RESISTOR CH 1/10W 150K	2	
R4071	ERJ6GMYJ103	M. RESISTOR CH 1/10W 10K	1	
R4072	ERJ6GMYJ224	M. RESISTOR CH 1/10W 220K	1	
R4073	ERJ6GMYJ472	M. RESISTOR CH 1/10W 4. 7K	1	
R4503-06	ERJ6GMYJ753	M. RESISTOR CH 1/10W 75K	4	
R4509	ERJ6GMYK335	M. RESISTOR CH 1/10W 3. 3M	1	
R4510	ERJ6GMYJ221	M. RESISTOR CH 1/10W 220	1	
R4512	ERJ6GMYJ221	M. RESISTOR CH 1/10W 220	1	
R4514	ERJ6GMYJ221	M. RESISTOR CH 1/10W 220	1	
R4516, 17	ERJ6GMYJ104	M. RESISTOR CH 1/10W 100K	2	
R4518, 19	ERJ6GMYJ221	M. RESISTOR CH 1/10W 220	2	
R4520	ERJ6GMYJ223	M. RESISTOR CH 1/10W 22K	1	
R4521	ERJ6GMYJ393	M. RESISTOR CH 1/10W 39K	1	
R4522	ERJ6GMYJ332	M. RESISTOR CH 1/10W 3. 3K	1	
R4523	ERJ6RBD393	M. RESISTOR CH 1/10W 39K	1	[SUPPLIED FROM MBV]
R4524	ERJ6GMYJ332	M. RESISTOR CH 1/10W 3. 3K	1	
R4525	ERJ6GMYJ393	M. RESISTOR CH 1/10W 39K	1	
R4526	ERJ6GMYJ221	M. RESISTOR CH 1/10W 220	1	
R4527	ERJ6GMYJ103	M. RESISTOR CH 1/10W 10K	1	
R4528	ERJ6GMYJ102	M. RESISTOR CH 1/10W 1K	1	
R4529, 30	ERJ6GMYJ391	M. RESISTOR CH 1/10W 390	2	
R4539	ERJ6GMYJ223	M. RESISTOR CH 1/10W 22K	1	
R4901, 02	ERJ6GMYJ331	M. RESISTOR CH 1/10W 330	2	
R4905	ERDS2TJ471	C. RESISTOR 1/4W 470	1	
R4907, 08	ERJ6GMYJ221	M. RESISTOR CH 1/10W 220	2	
R4911	ERJ6GMYJ221	M. RESISTOR CH 1/10W 220	1	
R4912	ERJ6GMYJ472	M. RESISTOR CH 1/10W 4. 7K	1	
R4913	ERJ6GMYJ153	M. RESISTOR CH 1/10W 15K	1	
R4915	ERJ6GMYJ223	M. RESISTOR CH 1/10W 22K	1	
R4916	ERJ6GMYJ471	M. RESISTOR CH 1/10W 470	1	
R4921	ERJ6GMYJ331	M. RESISTOR CH 1/10W 330	1	
R4923	ERJ6GMYJ331	M. RESISTOR CH 1/10W 330	1	
R4924, 25	ERJ6GMYJ750	M. RESISTOR CH 1/10W 75	2	
R4926, 27	ERJ6GMYJ473	M. RESISTOR CH 1/10W 47K	2	
R4928, 29	ERJ6GMYJ750	M. RESISTOR CH 1/10W 75	2	
R4931	ERJ6GMYJ103	M. RESISTOR CH 1/10W 10K	1	
R4933	ERJ6GMYJ911	M. RESISTOR CH 1/10W 910	1	
R4934	ERJ6GMYJ102	M. RESISTOR CH 1/10W 1K	1	
R6001	ERJ6GMYJ562	M. RESISTOR CH 1/10W 5. 6K	1	
R6002, 03	ERJ6GMYJ102	M. RESISTOR CH 1/10W 1K	2	
R6005	ERJ6GMYJ103	M. RESISTOR CH 1/10W 10K	1	
R6006	ERJ6GMYJ102	M. RESISTOR CH 1/10W 1K	1	
R6007	ERJ6GMYJ273	M. RESISTOR CH 1/10W 27K	1	
R6008	ERJ6GMYJ224	M. RESISTOR CH 1/10W 220K	1	
R6010	ERJ6GMYJ153	M. RESISTOR CH 1/10W 15K	1	
R6011	ERJ6GMYJ103	M. RESISTOR CH 1/10W 10K	1	
R6012, 13	ERJ6GMYJ472	M. RESISTOR CH 1/10W 4. 7K	2	
R6014	ERJ6GMZ0R00	M. RESISTOR CH 1/10W 0	1	
R6015	ERJ6GMYJ103	M. RESISTOR CH 1/10W 10K	1	
R6016	ERJ6GMYJ153	M. RESISTOR CH 1/10W 15K	1	

Ref. No.	Part No.	Part Name & Description	Pcs	Remarks
R6017	ERJ6GMYJ682	M. RESISTOR CH 1/10W 6. 8K	1	
R6018	ERDS2TJ221	C. RESISTOR 1/4W 220	1	
R6020	ERJ6GMYJ102	M. RESISTOR CH 1/10W 1K	1	
R6022	ERJ6GMYJ102	M. RESISTOR CH 1/10W 1K	1	
R6023-30	ERJ6GMYJ221	M. RESISTOR CH 1/10W 220	8	
R6031	ERJ6GMYJ273	M. RESISTOR CH 1/10W 27K	1	
R6032	ERJ6GMYJ393	M. RESISTOR CH 1/10W 39K	1	
R6033	ERJ6GMYJ273	M. RESISTOR CH 1/10W 27K	1	
R6036	ERJ6GMYJ101	M. RESISTOR CH 1/10W 100	1	
R6038	ERJ6GMYJ433	M. RESISTOR CH 1/10W 43K	1	
R6039	ERJ6GMYJ393	M. RESISTOR CH 1/10W 39K	1	
R7302	ERJ3GEY0R00	M. RESISTOR CH 1/16W 0	1	
R7305, 06	ERJ6GEYJ101	M. RESISTOR CH 1/10W 100	2	
R7316	ERJ3GEYJ103	M. RESISTOR CH 1/16W 10K	1	
R7324	ERJ3GEYJ221	M. RESISTOR CH 1/16W 220	1	
R7325	ERJ3GEY0R00	M. RESISTOR CH 1/16W 0	1	
R7327	ERJ3GEYJ822	M. RESISTOR CH 1/16W 8. 2K	1	
R7328, 29	ERJ3GEYJ221	M. RESISTOR CH 1/16W 220	2	
R7501	ERDS2TJ150	C. RESISTOR 1/4W 15	1	
R7502	ERJ6GMYJ101	M. RESISTOR CH 1/10W 100	1	
R7503, 04	ERJ6GMYJ202	M. RESISTOR CH 1/10W 2K	2	
R7505	ERJ6GMZ0R00	M. RESISTOR CH 1/10W 0	1	
R7506-08	ERJ6GMYJ332	M. RESISTOR CH 1/10W 3. 3K	3	
R7509	ERJ6GMYJ822	M. RESISTOR CH 1/10W 8. 2K	1	
R7510	ERJ6GMYJ562	M. RESISTOR CH 1/10W 5. 6K	1	
R7511	ERJ6GMYJ432	M. RESISTOR CH 1/10W 4. 3K	1	
R7512, 13	ERJ6GMYJ103	M. RESISTOR CH 1/10W 10K	2	
R7514	ERJ6GMYJ822	M. RESISTOR CH 1/10W 8. 2K	1	
R7515	ERJ6GMYJ562	M. RESISTOR CH 1/10W 5. 6K	1	
R7516	ERJ6GMYJ432	M. RESISTOR CH 1/10W 4. 3K	1	
R7517	ERJ6GMYJ103	M. RESISTOR CH 1/10W 10K	1	
R7520, 21	ERJ6GMYJ223	M. RESISTOR CH 1/10W 22K	2	
R7522	ERJ6GMYJ181	M. RESISTOR CH 1/10W 180	1	
R7523-26	ERJ6GMYJ303	M. RESISTOR CH 1/10W 30K	4	
R7538	ERJ6GMYJ432	M. RESISTOR CH 1/10W 4. 3K	1	
R7549	ERDS2TJ150	C. RESISTOR 1/4W 15	1	
R7601, 02	ERJ6GMYJ101	M. RESISTOR CH 1/10W 100	2	
R7603	ERJ6GMYJ102	M. RESISTOR CH 1/10W 1K	1	
R7606, 07	ERJ6GMYJ101	M. RESISTOR CH 1/10W 100	2	
R7608, 09	ERDS2TJ331	C. RESISTOR 1/4W 330	2	
R7610	ERJ6GMYJ151	M. RESISTOR CH 1/10W 150	1	
R7612	ERJ6GMZ0R00	M. RESISTOR CH 1/10W 0	1	
R7613	ERJ6GMYJ151	M. RESISTOR CH 1/10W 150	1	
R7614	ERJ6GMYJ561	M. RESISTOR CH 1/10W 560	1	
R7615	ERJ6GMYJ103	M. RESISTOR CH 1/10W 10K	1	
R7620	ERJ6GMYJ104	M. RESISTOR CH 1/10W 100K	1	
R7621	ERJ6GMYJ182	M. RESISTOR CH 1/10W 1. 8K	1	
R7622, 23	ERJ6GMYJ154	M. RESISTOR CH 1/10W 150K	2	
R7704	ERJ6GMYJ472	M. RESISTOR CH 1/10W 4. 7K	1	
R7705	ERJ6GMYJ473	M. RESISTOR CH 1/10W 47K	1	
R7707	ERJ6GMYJ471	M. RESISTOR CH 1/10W 470	1	
R7708-10	ERJ6GMYJ511	M. RESISTOR CH 1/10W 510	3	
R7711	ERJ6GMYJ104	M. RESISTOR CH 1/10W 100K	1	
R7712	ERJ6GMYJ102	M. RESISTOR CH 1/10W 1K	1	
R7713	ERJ6GMYJ104	M. RESISTOR CH 1/10W 100K	1	
R7714	ERJ6GMYG153	M. RESISTOR CH 1/10W 15K	1	
R7715	ERJ6GMYG152	M. RESISTOR CH 1/10W 1. 5K	1	
R7716	ERJ6GMYG562	M. RESISTOR CH 1/10W 5. 6K	1	
R7729	ERJ6GMYJ102	M. RESISTOR CH 1/10W 1K	1	
R7730	ERJ6GMYJ332	M. RESISTOR CH 1/10W 3. 3K	1	
R7740	ERJ6GMYJ472	M. RESISTOR CH 1/10W 4. 7K	1	
R7741-44	ERJ6GMYJ101	M. RESISTOR CH 1/10W 100	4	
R7746	ERJ6GMYJ101	M. RESISTOR CH 1/10W 100	1	
R7751, 52	ERJ6GMYJ101	M. RESISTOR CH 1/10W 100	2	
R7753	ERJ6GMYJ272	M. RESISTOR CH 1/10W 2. 7K	1	
R7754-57	ERJ6GMYJ101	M. RESISTOR CH 1/10W 100	4	
R7759	ERJ6GMYJ222	M. RESISTOR CH 1/10W 2. 2K	1	
R7760	ERJ6GMZ0R00	M. RESISTOR CH 1/10W 0	1	
R7761	ERJ6GMYJ472	M. RESISTOR CH 1/10W 4. 7K	1	
R7765-67	ERJ6GMYJ101	M. RESISTOR CH 1/10W 100	3	
R7768	ERJ6GMYJ472	M. RESISTOR CH 1/10W 4. 7K	1	
R7769	ERJ6GMYJ101	M. RESISTOR CH 1/10W 100	1	
R7770	ERJ6GMYJ472	M. RESISTOR CH 1/10W 4. 7K	1	
R7771-78	ERJ6GMYJ101	M. RESISTOR CH 1/10W 100	8	
R7784, 85	ERJ6GMYJ472	M. RESISTOR CH 1/10W 4. 7K	2	

Ref. No.	Part No.	Part Name & Description	Pcs	Remarks
R7792-99	ERJ6GMYJ101	M. RESISTOR CH 1/10W 100	8	
R7802, 03	ERJ6GMZ0R00	M. RESISTOR CH 1/10W 0	2	
R7804, 05	ERJ6GMYJ102	M. RESISTOR CH 1/10W 1K	2	
R7807	ERJ6GMYJ102	M. RESISTOR CH 1/10W 1K	1	
R7809	ERJ6GMYJ472	M. RESISTOR CH 1/10W 4. 7K	1	
S1501	VSS0520-3	MODE SELECT SWITCH	1	[SUPPLIED FROM MBV]
S7501	VES0834	S-TAB SWITCH	1	
S7502-06	EVQ11L07B	SWITCH	5	
T0701	EQV5EC083P	TRANSFORMER	1	[SUPPLIED FROM MBV]
T4001	EQQ7QF024P	TRANSFORMER	1	
⚠ TU7601	ENG47308G1	TUNER	1	[SUPPLIED FROM MBV]
VR0701	EVNCBAA00B14	V. RESISTOR	1	
X0701	VLF1417	FILTER	1	[SUPPLIED FROM MBV]
X0704	VLF1495	FILTER	1	[SUPPLIED FROM MBV]
X3001	VSX0162	CRYSTAL OSCILLATOR	1	
X6001	VSX0830	CRYSTAL OSCILLATOR	1	
X6002	VSX0660	CRYSTAL OSCILLATOR	1	
X7302	VSX0953	CRYSTAL OSCILLATOR	1	
X7701	VSX1043	CRYSTAL OSCILLATOR	1	
		MISCELLANEOUS		
	VSC4999	SHIELD CASE (MIDDLE)	1	[SUPPLIED FROM MBV]
	VSC4998	HA ANGLE	1	[SUPPLIED FROM MBV]
	VXQ0648	FIP HOLDER	1	
	VSC4752	SHIELD CASE (MAIN)	1	FOR NICAM DECODER C. B. A.
	VMP5897	CONNECTING ANGLE	1	FOR TV DEMODULATOR C. B. A.
■	VEP06D25C	MAIN C. B. A.		[SUPPLIED FROM MBV]
				(RTL) NV-FJ610BL-S
C0701	ECUM1C105ZFN	C. CAPACITOR CH 16V 1U	1	
C0702	ECUX1H102KBV	C. CAPACITOR CH 50V 1000P	1	
C0703	ECUM1A105KBN	C. CAPACITOR CH 10V 1U	1	
C0704	ECUM1E333KBN	C. CAPACITOR CH 25V 0. 033U	1	
C0706	ECEA1HKA010	E. CAPACITOR 50V 1U	1	
C0707	ECEA1HKA2R2	E. CAPACITOR 50V 2. 2U	1	
C0708	ECEA1HKAR47	E. CAPACITOR 50V 0. 47U	1	
C0710	ECUX1H103ZFV	C. CAPACITOR CH 50V 0. 01U	1	
C0711	ECEA1CKA220	E. CAPACITOR 16V 22U	1	
C0712	ECUX1C104ZFV	C. CAPACITOR CH 16V 0. 1U	1	
C0713	EEUFA1A391	E. CAPACITOR 10V 390U	1	
C0714	ECUM1C105ZFN	C. CAPACITOR CH 16V 1U	1	
C0715	ECUX1H030CCV	C. CAPACITOR CH 50V 3P	1	
C0716	ECUX1H123KBV	C. CAPACITOR CH 50V 0. 012U	1	
C0717	ECUM1H330GUV	C. CAPACITOR CH 50V 33P	1	
C0719	ECUX1E104ZFV	C. CAPACITOR CH 25V 0. 1U	1	
C0721	ECUX1H820JCV	C. CAPACITOR CH 50V 82P	1	
C0724	ECUX1H331KBV	C. CAPACITOR CH 50V 330P	1	
C1001	ECEA1AKG220	E. CAPACITOR 10V 22U	1	[SUPPLIED FROM MBV]
C1002	ECUM1H103ZFN	C. CAPACITOR CH 50V 0. 01U	1	
C1003	ECEA1CGE470	E. CAPACITOR 16V 47U	1	
C1004	ECUM1H103ZFN	C. CAPACITOR CH 50V 0. 01U	1	
C1005	ECEA1AKA470	E. CAPACITOR 10V 47U	1	
C1006, 07	ECUM1H103ZFN	C. CAPACITOR CH 50V 0. 01U	2	
C1008	ECA1CAK470X	E. CAPACITOR 16V 47U	1	
C1009	ECEA0JKA470	E. CAPACITOR 6. 3V 47U	1	
C1010	ECEA1CGE470	E. CAPACITOR 16V 47U	1	
C1011, 12	ECEA1CKA100	E. CAPACITOR 16V 10U	2	
C1015	ECUM1H102KBN	C. CAPACITOR CH 50V 1000P	1	
C1016	ECA1CAK100X	E. CAPACITOR 16V 10U	1	
C1017	ECEA1HKA4R7	E. CAPACITOR 50V 4. 7U	1	
C1201	ECEA0JKA101	E. CAPACITOR 6. 3V 100U	1	
C1202	ECUM1H103ZFN	C. CAPACITOR CH 50V 0. 01U	1	
C1203	ECEA1AKA220	E. CAPACITOR 10V 22U	1	
C1204	ECUM1H103ZFN	C. CAPACITOR CH 50V 0. 01U	1	
C1205	ECEA0JKA470	E. CAPACITOR 6. 3V 47U	1	
C1206, 07	ECUM1E104KBN	C. CAPACITOR CH 25V 0. 1U	2	
C1208	ECUM1H103ZFN	C. CAPACITOR CH 50V 0. 01U	1	
C1501	ECUM1H221JCN	C. CAPACITOR CH 50V 220P	1	

Ref. No.	Part No.	Part Name & Description	Pcs	Remarks
C2501	ECUM1C474ZFN	C. CAPACITOR CH 16V 0. 47U	1	
C2502	ECEA1VKN4R7	E. CAPACITOR 35V 4. 7U	1	
C2503	ECUM1H563ZFN	C. CAPACITOR CH 50V 0. 056U	1	
C2504	ECEA1EKA470	E. CAPACITOR 25V 47U	1	
C2505	ECUM1H330JCN	C. CAPACITOR CH 50V 33P	1	
C2506	ECEA0JKN220	E. CAPACITOR 6. 3V 22U	1	
C2507	ECUM1H104ZFN	C. CAPACITOR CH 50V 0. 1U	1	
C2508	ECEA1EKA4R7	E. CAPACITOR 25V 4. 7U	1	
C2509, 10	ECUM1H563ZFN	C. CAPACITOR CH 50V 0. 056U	2	
C2511	ECEA1VKN4R7	E. CAPACITOR 35V 4. 7U	1	
C2512	ECUM1H392KBN	C. CAPACITOR CH 50V 3900P	1	
C2516	ECEA0JKA221	E. CAPACITOR 6. 3V 220U	1	
C2518	ECUM1H473ZFN	C. CAPACITOR CH 50V 0. 047U	1	
C2521	ECEA1EKA470	E. CAPACITOR 25V 47U	1	
C2522	ECUM1E683KBN	C. CAPACITOR CH 25V 0. 068U	1	
C2523-25	ECUM1C154KBN	C. CAPACITOR CH 16V 0. 15U	3	
C2526	ECEA1VKN4R7	E. CAPACITOR 35V 4. 7U	1	
C2535, 36	ECUM1H104ZFN	C. CAPACITOR CH 50V 0. 1U	2	
C3002, 03	ECUM1H102KBN	C. CAPACITOR CH 50V 1000P	2	
C3004	ECEA1HKA010	E. CAPACITOR 50V 1U	1	
C3005	ECUM1H680JCN	C. CAPACITOR CH 50V 68P	1	
C3006	ECUM1H060DCN	C. CAPACITOR CH 50V 6P	1	
C3007	ECUM1E104KBN	C. CAPACITOR CH 25V 0. 1U	1	
C3008	ECUM1H103ZFN	C. CAPACITOR CH 50V 0. 01U	1	
C3011	ECEA0JKA221	E. CAPACITOR 6. 3V 220U	1	
C3012, 13	ECUM1H104ZFN	C. CAPACITOR CH 50V 0. 1U	2	
C3014	ECUM1H103ZFN	C. CAPACITOR CH 50V 0. 01U	1	
C3015	ECEA1HKA010	E. CAPACITOR 50V 1U	1	
C3016	ECUM1H333KBN	C. CAPACITOR CH 50V 0. 033U	1	
C3017	ECUM1H104ZFN	C. CAPACITOR CH 50V 0. 1U	1	
C3018	ECEA0JKA101	E. CAPACITOR 6. 3V 100U	1	
C3019	ECUM1E104KBN	C. CAPACITOR CH 25V 0. 1U	1	
C3020	ECUM1H222KBN	C. CAPACITOR CH 50V 2200P	1	
C3021	ERJ6GMZ0R00	M. RESISTOR CH 1/10W 0	1	
C3024	ECEA0JKA470	E. CAPACITOR 6. 3V 47U	1	
C3025	ECEA0JKA101	E. CAPACITOR 6. 3V 100U	1	
C3026	ECUM1H104ZFN	C. CAPACITOR CH 50V 0. 1U	1	
C3029	ECUM1H103ZFN	C. CAPACITOR CH 50V 0. 01U	1	
C3030	ECUM1H222KBN	C. CAPACITOR CH 50V 2200P	1	
C3031	ECEA1HKAR47	E. CAPACITOR 50V 0. 47U	1	
C3033	ECEA1EKN4R7	E. CAPACITOR 25V 4. 7U	1	
C3034	ECEA1EKA4R7	E. CAPACITOR 25V 4. 7U	1	
C3035	ECUM1H104ZFN	C. CAPACITOR CH 50V 0. 1U	1	
C3036	ECEA0JKA221	E. CAPACITOR 6. 3V 220U	1	
C3037	ECUM1H104ZFN	C. CAPACITOR CH 50V 0. 1U	1	
C3038	ECEA0JKA101	E. CAPACITOR 6. 3V 100U	1	
C3039	ECEA0JKA220	E. CAPACITOR 6. 3V 22U	1	
C3040	ECUM1H223KBN	C. CAPACITOR CH 50V 0. 022U	1	
C3041	ECEA1CKA100	E. CAPACITOR 16V 10U	1	
C3042	ECUM1H560JCN	C. CAPACITOR CH 50V 56P	1	
C3043	ECUM1H104ZFN	C. CAPACITOR CH 50V 0. 1U	1	
C3044	ECUM1H821JCN	C. CAPACITOR CH 50V 820P	1	
C3045	ECUM1H221JCN	C. CAPACITOR CH 50V 220P	1	
C3046	ECUM1H220JCN	C. CAPACITOR CH 50V 22P	1	
C3047	ECEA0JKA220	E. CAPACITOR 6. 3V 22U	1	
C3048	ECUM1H560JCN	C. CAPACITOR CH 50V 56P	1	
C3049	ECUM1H681JCN	C. CAPACITOR CH 50V 680P	1	
C3050	ECUM1H680JCN	C. CAPACITOR CH 50V 68P	1	
C3051	ECUM1H220JCN	C. CAPACITOR CH 50V 22P	1	
C3052, 53	ECUM1H104ZFN	C. CAPACITOR CH 50V 0. 1U	2	
C3054, 55	ECUM1E104KBN	C. CAPACITOR CH 25V 0. 1U	2	
C3502	ECUM1H103KBN	C. CAPACITOR CH 50V 0. 01U	1	
C3504	ECUM1H103KBN	C. CAPACITOR CH 50V 0. 01U	1	
C3505	ECEA0JKS470	E. CAPACITOR 6. 3V 47U	1	
C3506	ECUM1H103KBN	C. CAPACITOR CH 50V 0. 01U	1	
C3507-10	ECUM1E104KBN	C. CAPACITOR CH 25V 0. 1U	4	
C4001	ECEA1HKN010	E. CAPACITOR 50V 1U	1	
C4002	ECQB1H822JF	P. CAPACITOR 50V 8200P	1	
C4003	ECEA1HKA010	E. CAPACITOR 50V 1U	1	
C4004	ECEA1EKA4R7	E. CAPACITOR 25V 4. 7U	1	
C4005	ECUM1H272KBN	C. CAPACITOR CH 50V 2700P	1	
C4006	ECEA0JKA220	E. CAPACITOR 6. 3V 22U	1	
C4007	ECUM1H122JCN	C. CAPACITOR CH 50V 1200P	1	[SUPPLIED FROM MBV]
C4010, 11	ECUM1H153KBN	C. CAPACITOR CH 50V 0. 015U	2	
C4012	ECEA1HKA010	E. CAPACITOR 50V 1U	1	

Ref. No.	Part No.	Part Name & Description	Pcs	Remarks
C4013	ECEA0JKA470	E. CAPACITOR 6. 3V 47U	1	
C4014	ECEA1HKA0R1	E. CAPACITOR 50V 0. 1U	1	
C4015	ECEA0JKA220	E. CAPACITOR 6. 3V 22U	1	
C4016	ECEA1HKA0R1	E. CAPACITOR 50V 0. 1U	1	
C4018	ECUM1H104ZFN	C. CAPACITOR CH 50V 0. 1U	1	
C4019	ECEA0JKA470	E. CAPACITOR 6. 3V 47U	1	
C4045	ECUM1H103KBN	C. CAPACITOR CH 50V 0. 01U	1	
C4046-48	ECA1CAK100X	E. CAPACITOR 16V 10U	3	
C4068	ECQB1H223JF	P. CAPACITOR 50V 0. 022U	1	
C4070	ECUM1H221JCN	C. CAPACITOR CH 50V 220P	1	
C4072	ECEA0JKA221	E. CAPACITOR 6. 3V 220U	1	
C4073	ECUM1H223KBN	C. CAPACITOR CH 50V 0. 022U	1	
C4074	ECUM1H152JCN	C. CAPACITOR CH 50V 1500P	1	
C4075	ECEA1AKA220	E. CAPACITOR 10V 22U	1	
C4501, 02	ECEA1HKNR47	E. CAPACITOR 50V 0. 47U	2	[SUPPLIED FROM MBV]
C4505-08	ECA1HAKR22X	E. CAPACITOR 50V 0. 22U	4	
C4511, 12	ECEA1CKA100	E. CAPACITOR 16V 10U	2	
C4513-16	ECA1CAK100X	E. CAPACITOR 16V 10U	4	
C4517	ECEA1CKA100	E. CAPACITOR 16V 10U	1	
C4518	ECEA1HKAR22	E. CAPACITOR 50V 0. 22U	1	
C4519	ECA1CAK100X	E. CAPACITOR 16V 10U	1	
C4520	ECQB1H562JF	P. CAPACITOR 50V 5600P	1	
C4521	ECA1CAK470X	E. CAPACITOR 16V 47U	1	
C4522	ECA1CAK100X	E. CAPACITOR 16V 10U	1	
C4523	ECA1HAK2R2X	E. CAPACITOR 50V 2. 2U	1	[SUPPLIED FROM MBV]
C4524	ECA1CAK100X	E. CAPACITOR 16V 10U	1	
C4525	ECA1CAK470X	E. CAPACITOR 16V 47U	1	
C4526	ECQB1H562JF	P. CAPACITOR 50V 5600P	1	
C4527	ECA1CAK100X	E. CAPACITOR 16V 10U	1	
C4528	ECUM1H104ZFN	C. CAPACITOR CH 50V 0. 1U	1	
C4529	ECEA1CKS470	E. CAPACITOR 16V 47U	1	
C4530	ECUM1E104KBN	C. CAPACITOR CH 25V 0. 1U	1	
C4531	ECUM1H103KBN	C. CAPACITOR CH 50V 0. 01U	1	
C4532	ECUM1H561JCN	C. CAPACITOR CH 50V 560P	1	
C4533	ECUM1H104ZFN	C. CAPACITOR CH 50V 0. 1U	1	
C4534	ECEA0JKS331	E. CAPACITOR 6. 3V 330U	1	
C4535	ECUM1H471JCN	C. CAPACITOR CH 50V 470P	1	
C4540	ECUM1H102KBN	C. CAPACITOR CH 50V 1000P	1	
C4901, 02	ECUM1H470JCN	C. CAPACITOR CH 50V 47P	2	
C4903-09	ECUM1H471KBN	C. CAPACITOR CH 50V 470P	7	
C4912, 13	ECUM1H470JCN	C. CAPACITOR CH 50V 47P	2	
C4914	ECUM1H471KBN	C. CAPACITOR CH 50V 470P	1	
C4917	ECUM1E104KBN	C. CAPACITOR CH 25V 0. 1U	1	
C4921	ECUM1E104KBN	C. CAPACITOR CH 25V 0. 1U	1	
C4922	ECEA1CKA470	E. CAPACITOR 16V 47U	1	
C4923	ECUM1E104KBN	C. CAPACITOR CH 25V 0. 1U	1	
C4925	ECUM1H104ZFN	C. CAPACITOR CH 50V 0. 1U	1	
C4926	ECEA1CKA470	E. CAPACITOR 16V 47U	1	
C4927	ECUM1H104ZFN	C. CAPACITOR CH 50V 0. 1U	1	
C4928	ECEA0JKA331	E. CAPACITOR 6. 3V 330U	1	
C4929	ECUM1H104ZFN	C. CAPACITOR CH 50V 0. 1U	1	
C4932	ECUM1H104ZFN	C. CAPACITOR CH 50V 0. 1U	1	
C4933	ECEA1CKA470	E. CAPACITOR 16V 47U	1	
C4935	ECUM1H222KBN	C. CAPACITOR CH 50V 2200P	1	
C4938	ECUM1H222KBN	C. CAPACITOR CH 50V 2200P	1	
C4939	ECUM1H104ZFN	C. CAPACITOR CH 50V 0. 1U	1	
C4940	ECEA0JKA331	E. CAPACITOR 6. 3V 330U	1	
C4941	ECUM1E104KBN	C. CAPACITOR CH 25V 0. 1U	1	
C6001	ECEA0JKA470	E. CAPACITOR 6. 3V 47U	1	
C6002	ECUM1H103ZFN	C. CAPACITOR CH 50V 0. 01U	1	
C6003	ECUM1H200JCN	C. CAPACITOR CH 50V 20P	1	
C6004	ECUM1H120JCN	C. CAPACITOR CH 50V 12P	1	
C6005	ECUM1H103ZFN	C. CAPACITOR CH 50V 0. 01U	1	
C6006	ECUM1H471JCN	C. CAPACITOR CH 50V 470P	1	
C6007, 08	ECUM1H121JCN	C. CAPACITOR CH 50V 120P	2	
C6009	ECUM1H681JCN	C. CAPACITOR CH 50V 680P	1	
C6010	ECUM1H104ZFN	C. CAPACITOR CH 50V 0. 1U	1	
C6011	ECEA0JKA470	E. CAPACITOR 6. 3V 47U	1	
C6012	ECUM1H102KBN	C. CAPACITOR CH 50V 1000P	1	
C6013	ECUM1H180JCN	C. CAPACITOR CH 50V 18P	1	
C6016	ECUM1H180JCN	C. CAPACITOR CH 50V 18P	1	
C6017	ECEA1CKA100	E. CAPACITOR 16V 10U	1	
C6018	ECUM1H102KBN	C. CAPACITOR CH 50V 1000P	1	
C6019	ECUM1H151JCN	C. CAPACITOR CH 50V 150P	1	
C6022	ECUM1H103ZFN	C. CAPACITOR CH 50V 0. 01U	1	

Ref. No.	Part No.	Part Name & Description	Pcs	Remarks
C7302	VCEA0JAW101	E. CAPACITOR 6. 3V 100U	1	
C7303	ECUX1H103ZFV	C. CAPACITOR CH 50V 0. 01U	1	
C7304	VCEA0JAW101	E. CAPACITOR 6. 3V 100U	1	
C7305, 06	ECUX1H330JCV	C. CAPACITOR CH 50V 33P	2	
C7307	ECUX1H103ZFV	C. CAPACITOR CH 50V 0. 01U	1	
C7308	ECEA1HKA2R2	E. CAPACITOR 50V 2. 2U	1	
C7311	ERJ3GEY0R00	M. RESISTOR CH 1/16W 0	1	
C7312, 13	ECUX1C104ZFV	C. CAPACITOR CH 16V 0. 1U	2	
C7315	ECUM1E104KBN	C. CAPACITOR CH 25V 0. 1U	1	
C7316	ECUX1C104ZFV	C. CAPACITOR CH 16V 0. 1U	1	
C7317	VCEA1CAW100	E. CAPACITOR 16V 10U	1	
C7318	VCEA0JAW470	E. CAPACITOR 6. 3V 47U	1	
C7319, 20	VCEA1CAW100	E. CAPACITOR 16V 10U	2	
C7324, 25	ECUX1C104ZFV	C. CAPACITOR CH 16V 0. 1U	2	
C7341, 42	ECUX1H472KBV	C. CAPACITOR CH 50V 4700P	2	
C7501	ECUM1H103ZFN	C. CAPACITOR CH 50V 0. 01U	1	
C7502	ECEA1HKA100	E. CAPACITOR 50V 10U	1	
C7503	ECUM1H120JCN	C. CAPACITOR CH 50V 12P	1	
C7504	ECEA0JKA101	E. CAPACITOR 6. 3V 100U	1	
C7505	ECUM1H104ZFN	C. CAPACITOR CH 50V 0. 1U	1	
C7506	VCE0073	SUPER CAPACITOR	1	
C7507	ECEA0JKA221	E. CAPACITOR 6. 3V 220U	1	
C7508	ECUM1H683ZFN	C. CAPACITOR CH 50V 0. 068U	1	
C7509	ECUM1H103ZFN	C. CAPACITOR CH 50V 0. 01U	1	
C7601	ECEA0JKA101	E. CAPACITOR 6. 3V 100U	1	
C7602	ECUM1H221JCN	C. CAPACITOR CH 50V 220P	1	
C7603	ECEA0JKA101	E. CAPACITOR 6. 3V 100U	1	
C7605, 06	ECUM1H330JCN	C. CAPACITOR CH 50V 33P	2	
C7607	ECEA0JKA101	E. CAPACITOR 6. 3V 100U	1	
C7608	ECUM1H103ZFN	C. CAPACITOR CH 50V 0. 01U	1	
C7610	ECEA1HKA100	E. CAPACITOR 50V 10U	1	
C7611	ECUM1H104ZFN	C. CAPACITOR CH 50V 0. 1U	1	
C7612	ECUM1H221JCN	C. CAPACITOR CH 50V 220P	1	
C7613	ERJ6GMZ0R00	M. RESISTOR CH 1/10W 0	1	
C7615	ECQV1H104JM	P. CAPACITOR 50V 0. 1U	1	
C7618	ECUM1E104KBN	C. CAPACITOR CH 25V 0. 1U	1	
C7619	ECUM1H104ZFN	C. CAPACITOR CH 50V 0. 1U	1	
C7620, 21	ECA1HAK2R2X	E. CAPACITOR 50V 2. 2U	2	[SUPPLIED FROM MBV]
C7623	ECUM1H330JCN	C. CAPACITOR CH 50V 33P	1	
C7701, 02	ECUM1H104ZFN	C. CAPACITOR CH 50V 0. 1U	2	
C7705	ECUM1H104ZFN	C. CAPACITOR CH 50V 0. 1U	1	
C7708	ECUM1H104ZFN	C. CAPACITOR CH 50V 0. 1U	1	
C7709	ECEA0JKA470	E. CAPACITOR 6. 3V 47U	1	
C7711	ECUM1C105ZFN	C. CAPACITOR CH 16V 1U	1	
C7712, 13	ECUM1H103ZFN	C. CAPACITOR CH 50V 0. 01U	2	
C7714	ECUM1H470JCN	C. CAPACITOR CH 50V 47P	1	
C7715	ECUM1C105ZFN	C. CAPACITOR CH 16V 1U	1	
C7716	ECUM1H471JCN	C. CAPACITOR CH 50V 470P	1	
C7717	ECUM1C105ZFN	C. CAPACITOR CH 16V 1U	1	
C7718	ECUM1H471JCN	C. CAPACITOR CH 50V 470P	1	
C7720	ECEA0JKA470	E. CAPACITOR 6. 3V 47U	1	
C7721	ECEA1EKA4R7	E. CAPACITOR 25V 4. 7U	1	
C7722, 23	ECUM1H104ZFN	C. CAPACITOR CH 50V 0. 1U	2	
C7728	ECEA1EKA4R7	E. CAPACITOR 25V 4. 7U	1	
C7729	ECUM1H104ZFN	C. CAPACITOR CH 50V 0. 1U	1	
C7730	ECEA0JKA101	E. CAPACITOR 6. 3V 100U	1	
C7731	ECUM1H820JCN	C. CAPACITOR CH 50V 82P	1	
C7735, 36	ECUM1H104ZFN	C. CAPACITOR CH 50V 0. 1U	2	
C7739	ECUM1H104ZFN	C. CAPACITOR CH 50V 0. 1U	1	
C7740	ECEA0JKA470	E. CAPACITOR 6. 3V 47U	1	
C7742	ECUM1H104ZFN	C. CAPACITOR CH 50V 0. 1U	1	
C7749, 50	ECUM1H270JCN	C. CAPACITOR CH 50V 27P	2	
C7752	ECEA0JKA470	E. CAPACITOR 6. 3V 47U	1	
C7802	ECEA0JKA470	E. CAPACITOR 6. 3V 47U	1	
C7803	ECUM1C105ZFN	C. CAPACITOR CH 16V 1U	1	
C7804	ECUM1H221JCN	C. CAPACITOR CH 50V 220P	1	
D0702	MA77	DIODE	1	
D1003	1SS254	DIODE	1	
D1004	MA4051N-H	DIODE	1	
D1006	MA4051N-L	DIODE	1	
D1009	MA4051N-M	DIODE	1	
D1010	1SS254	DIODE	1	
D1015, 16	1SS254	DIODE	2	
D1017	MA4120N-M	DIODE	1	[SUPPLIED FROM MBV]

Ref. No.	Part No.	Part Name & Description	Pcs	Remarks
D1018	1SS254	DIODE	1	
D1501	SIR505S	DIODE	1	
D2501, 02	1SS254	DIODE	2	
D3001	1SS254	DIODE	1	
D4905, 06	MA4075-M	DIODE	2	
D6002, 03	MA700	DIODE	2	
D7501	MA4220N-M	DIODE	1	[SUPPLIED FROM MBV]
D7503	RB441P	DIODE	1	
D7601	MA4300M	DIODE	1	
D7603, 04	1SS254	DIODE	2	
DP7501	VSL0533-B	FIP	1	[SUPPLIED FROM MBV]
FL7301	VLF0633	FILTER	1	
IC0701	LA75503	IC	1	[SUPPLIED FROM MBV]
IC1001	PQ20VB2E	IC	1	[SUPPLIED FROM MBV]
IC1201	UPC1093J	IC	1	[SUPPLIED FROM MBV]
IC1501, 02	RPI354N	IC	2	[SUPPLIED FROM MBV]
IC2502	AN3811NK	IC	1	[SUPPLIED FROM MBV]
IC3001	TDA9735HV3	IC	1	[SUPPLIED FROM MBV]
IC3501	AN3368SB	IC	1	[SUPPLIED FROM MBV]
IC4001	NJM4558M	IC	1	
IC4501	TDA9605H	IC	1	[SUPPLIED FROM MBV]
IC4901	LA73021M	IC	1	
IC6001	M3777AVCEZ	IC	1	[SUPPLIED FROM MBV]
IC7301	TDA9874AH	IC	1	[SUPPLIED FROM MBV]
IC7302	PST7043	IC	1	
IC7501	M35502AFP	IC	1	
IC7502	S80743AL	IC	1	
IC7503	PNA4611M02VT	IR RECEIVER UNIT	1	[SUPPLIED FROM MBV]
IC7504	RN5VD28AA	IC	1	[SUPPLIED FROM MBV]
IC7701	M3506SWVAX	IC	1	[SUPPLIED FROM MBV]
IC7703	M3062SVCEY	IC	1	[SUPPLIED FROM MBV]
IC7704	M24C16-WBN6	IC	1	[SUPPLIED FROM MBV]
⚠ IP1001, 02	UNH000300A	IC PROTECTOR	2	
⚠ IP1201, 02	UNH000300A	IC PROTECTOR	2	
JK4901	VJJ0377	RCA JACK	1	[SUPPLIED FROM MBV]
JK4903	VJS3634	21-PIN SCART JACK	1	[SUPPLIED FROM MBV]
K0703	ERJ3GEY0R00	M. RESISTOR CH 1/16W 0	1	
K0707	ERJ3GEY0R00	M. RESISTOR CH 1/16W 0	1	
K0709	ERJ3GEY0R00	M. RESISTOR CH 1/16W 0	1	
K2501	ERJ6GMZ0R00	M. RESISTOR CH 1/10W 0	1	
K2503	ERJ6GMZ0R00	M. RESISTOR CH 1/10W 0	1	
K3003	ERJ6GMZ0R00	M. RESISTOR CH 1/10W 0	1	
K7301-03	ERJ6GEY0R00	M. RESISTOR CH 1/10W 0	3	
K7603	ERJ6GMZ0R00	M. RESISTOR CH 1/10W 0	1	
L0701	ELJNAR22JF	CHIP INDUCTOR	1	[SUPPLIED FROM MBV]
L0703	ELJNA1R8JF	CHIP INDUCTOR	1	[SUPPLIED FROM MBV]
L2503	VLQ0599J680	COIL 68UH	1	
L3001	VLQ0599J220	COIL 22UH	1	
L3003	VLQ0599J470	COIL 47UH	1	
L3004	VLQ0599J680	COIL 68UH	1	
L3005, 06	VLQ0599J101	COIL 100UH	2	
L3007	VLQ0599J330	COIL 33UH	1	
L3008	VLQ0599J470	COIL 47UH	1	
L3009	VLQ0599J390	COIL 39UH	1	
L3010	VLQ0599J560	COIL 56UH	1	
L3501	VLQ0599J330	COIL 33UH	1	
L4001	ELELN153JA	INDUCTOR 15000UH	1	[SUPPLIED FROM MBV]
L4007	VLQ0599J680	COIL 68UH	1	
L4501	VLQ0599J100	COIL 10UH	1	
L4901	VLQ0599JR22	COIL 0.22UH	1	[SUPPLIED FROM MBV]
L4902-04	VLQ0599J680	COIL 68UH	3	
L6001	VLQ0599J101	COIL 100UH	1	
L6002	VLQ0599J2R2	COIL 2.2UH	1	
L7302	VLQ0599J1R0	COIL 1UH	1	
L7601-04	VLQ0599J330	COIL 33UH	4	
L7605	VLQ0599J100	COIL 10UH	1	
L7608	VLQ0599J1R0	COIL 1UH	1	
L7609	VLQ0599J100	COIL 10UH	1	

Ref. No.	Part No.	Part Name & Description	Pcs	Remarks
L7701, 02	VLQ0599J390	COIL 39UH	2	
L7704	VLQ0599J390	COIL 39UH	1	
L7706	VLQ0599J100	COIL 10UH	1	
L7707	VLQ0599J220	COIL 22UH	1	
L7801	VLQ0599J680	COIL 68UH	1	
LB3001, 02	ERJ6GMZ0R00	M. RESISTOR CH 1/10W 0	2	
LB3501-04	VLP0145	COIL	4	
LB4901-04	ERJ6GMYJ221	M. RESISTOR CH 1/10W 220	4	
LB4906, 07	ERJ6GMYJ221	M. RESISTOR CH 1/10W 220	2	
LB7301	ERJ6GEY0R00	M. RESISTOR CH 1/10W 0	1	
LB7303	ERJ6GEY0R00	M. RESISTOR CH 1/10W 0	1	
P1001	VJS3917A016W	CONNECTOR (FEMALE) 16P	1	
P1501	VJS3837A002	CONNECTOR (FEMALE) 2P	1	
P2501	VJP3835A012	CONNECTOR (MALE) 12P	1	
P2502	VJS3537A009G	CONNECTOR (FEMALE) 9P	1	
P3502	VJS3537A010G	CONNECTOR (FEMALE) 10P	1	
P4002	VJS3837A002	CONNECTOR (FEMALE) 2P	1	
P4003	VJS3537A006G	CONNECTOR (FEMALE) 6P	1	
PK0701	VJR0826E009W	CONNECTOR (MALE) 9P	1	
PK7301	VJR0777B007W	CONNECTOR (MALE) 7P	1	
PK7302	VJR0777B006W	CONNECTOR (MALE) 6P	1	
PP0701	VJP3589A004B	CONNECTOR (MALE) 4P	1	
Q0702	2SD601A-S	TRANSISTOR	1	
Q1001	2SD601A	TRANSISTOR	1	
Q1002	2SD602A	TRANSISTOR	1	
Q1003	2SD1996-S	TRANSISTOR	1	
Q1004	2SB710A	TRANSISTOR	1	
Q1005, 06	2SD1996-S	TRANSISTOR	2	
Q1007	2SD602A-R	TRANSISTOR	1	
Q1009	2SD1996-S	TRANSISTOR	1	
Q1010	2SD601A	TRANSISTOR	1	
Q1201, 02	2SD1996-S	TRANSISTOR	2	
Q1501	PNB2301MBV	TRANSISTOR	1	
Q1502	PNB2301MAV	TRANSISTOR	1	
Q3003	2SB709A	TRANSISTOR	1	
Q4001	2SD1149	TRANSISTOR	1	
Q4002	2SD601A	TRANSISTOR	1	
Q4006	2SB710A-R	TRANSISTOR	1	
Q4007	2SD602A-R	TRANSISTOR	1	
Q4901	2SB709A	TRANSISTOR	1	
Q4903, 04	2SD601A	TRANSISTOR	2	
Q4905	2SD1328-S	TRANSISTOR	1	
Q7601	2SD601A	TRANSISTOR	1	
Q7604	2SD601A	TRANSISTOR	1	
Q7605	2SB709A	TRANSISTOR	1	
Q7606	2SD601A	TRANSISTOR	1	
Q7701	2SD601A	TRANSISTOR	1	
Q7702	2SB709A	TRANSISTOR	1	
Q7703	2SD601A	TRANSISTOR	1	
Q7709	2SB709A	TRANSISTOR	1	
Q7802	2SD601A	TRANSISTOR	1	
QR1001	MUN2112	TRANSISTOR-RESISTOR	1	
QR1002	MUN2211	TRANSISTOR-RESISTOR	1	
QR1003	MUN2212	TRANSISTOR-RESISTOR	1	
QR3006, 07	MUN2212	TRANSISTOR-RESISTOR	2	
QR4001	UN2217	TRANSISTOR-RESISTOR	1	
QR4002	MUN2113	TRANSISTOR-RESISTOR	1	
QR4004	MUN2212	TRANSISTOR-RESISTOR	1	
QR4006	MUN2111	TRANSISTOR-RESISTOR	1	
QR4502-05	UN2215	TRANSISTOR	4	
QR4506	MUN2113	TRANSISTOR-RESISTOR	1	
QR4903	MUN2212	TRANSISTOR-RESISTOR	1	
QR6002	MUN2211	TRANSISTOR-RESISTOR	1	
QR6003, 04	MUN2212	TRANSISTOR-RESISTOR	2	
QR6005	MUN2211	TRANSISTOR-RESISTOR	1	
QR6006	MUN2213	TRANSISTOR-RESISTOR	1	
QR6007	MUN2113	TRANSISTOR-RESISTOR	1	
R0701	ERJ6GEYJ104	M. RESISTOR CH 1/10W 100K	1	

Ref. No.	Part No.	Part Name & Description	Pcs	Remarks
R0705	ERJ3GEYJ362	M. RESISTOR CH 1/16W 3. 6K	1	
R0707	ERJ3GEYJ393	M. RESISTOR CH 1/16W 39K	1	
R0708	ERJ3GEYJ103	M. RESISTOR CH 1/16W 10K	1	
R0711	ERJ3GEYJ181	M. RESISTOR CH 1/16W 180	1	
R0713	ERJ3GEY0R00	M. RESISTOR CH 1/16W 0	1	
R0715	ERJ3GEYJ223	M. RESISTOR CH 1/16W 22K	1	
R0717	ERJ3GEYJ152	M. RESISTOR CH 1/16W 1. 5K	1	
R0719	ERJ3GEYJ472	M. RESISTOR CH 1/16W 4. 7K	1	
R0725	ERJ6GEYJ101	M. RESISTOR CH 1/10W 100	1	
R0726	ERJ3GEYJ683	M. RESISTOR CH 1/16W 68K	1	
R0727, 28	ERJ3GEY0R00	M. RESISTOR CH 1/16W 0	2	
R0729	ERJ3GEYJ103	M. RESISTOR CH 1/16W 10K	1	
R0740	ERJ3GEYG471	M. RESISTOR CH 1/16W 470	1	
R0741	ERJ3GEYJ221	M. RESISTOR CH 1/16W 220	1	
R0742	ERJ8GEYJ151	M. RESISTOR CH 1/8W 150	1	
R0745	ERJ6GEYJ335	M. RESISTOR CH 1/10W 3. 3M	1	
R1001, 02	ERJ6GMYJ333	M. RESISTOR CH 1/10W 33K	2	
R1003, 04	ERJ6GMYJ562	M. RESISTOR CH 1/10W 5. 6K	2	
R1005	ERDS2TJ182	C. RESISTOR 1/4W 1. 8K	1	
R1006	ERJ6GMYJ472	M. RESISTOR CH 1/10W 4. 7K	1	
R1008	ERDS2TJ682	C. RESISTOR 1/4W 6. 8K	1	
R1009, 10	ERJ6GMYJ103	M. RESISTOR CH 1/10W 10K	2	
R1011	ERJ6GMYG823	M. RESISTOR CH 1/10W 82K	1	
R1012	ERDS2TJ272	C. RESISTOR 1/4W 2. 7K	1	
R1013	ERJ6GMYG153	M. RESISTOR CH 1/10W 15K	1	
R1014	ERJ6GMYG163	M. RESISTOR CH 1/10W 16K	1	
R1015	ERJ6GMYG123	M. RESISTOR CH 1/10W 12K	1	
R1016, 17	ERJ6GMYJ563	M. RESISTOR CH 1/10W 56K	2	
R1018, 19	ERJ6GMYJ683	M. RESISTOR CH 1/10W 68K	2	
R1022	ERJ6GMYJ103	M. RESISTOR CH 1/10W 10K	1	
R1023	ERJ6GMYJ123	M. RESISTOR CH 1/10W 12K	1	
R1024	ERJ6GMYJ103	M. RESISTOR CH 1/10W 10K	1	
R1026	ERJ6GMYJ152	M. RESISTOR CH 1/10W 1. 5K	1	
R1027	ERDS2TJ123	C. RESISTOR 1/4W 12K	1	
R1028	ERJ6GMYJ102	M. RESISTOR CH 1/10W 1K	1	
R1029	ERJ6GMYG562	M. RESISTOR CH 1/10W 5. 6K	1	
R1030	ERJ6GMYG622	M. RESISTOR CH 1/10W 6. 2K	1	
R1201, 02	ERJ6GMYG272	M. RESISTOR CH 1/10W 2. 7K	2	
R1203	ERJ6GMYJ623	M. RESISTOR CH 1/10W 6. 2K	1	
R1204	ERDS2TJ102	C. RESISTOR 1/4W 1K	1	
R1501	ERJ6GMYJ101	M. RESISTOR CH 1/10W 100	1	
R1502	ERJ6GMYJ273	M. RESISTOR CH 1/10W 27K	1	
R1503	ERDS2TJ181	C. RESISTOR 1/4W 180	1	
R1504	ERJ6GMYJ273	M. RESISTOR CH 1/10W 27K	1	
R1505	ERDS2TJ121	C. RESISTOR 1/4W 120	1	
R2501	ERDS2TJ331	C. RESISTOR 1/4W 330	1	
R2502	ERJ6GMYG433	M. RESISTOR CH 1/10W 43K	1	
R2503	ERDS2TJ330	C. RESISTOR 1/4W 33	1	
R2504	ERJ6GMZ0R00	M. RESISTOR CH 1/10W 0	1	
R2505	ERJ6GMYJ103	M. RESISTOR CH 1/10W 10K	1	
R2506	ERJ6GMYJ102	M. RESISTOR CH 1/10W 1K	1	
R2507	ERJ6GMYJ392	M. RESISTOR CH 1/10W 3. 9K	1	
R2508	ERDS2TJ330	C. RESISTOR 1/4W 33	1	
R2509	ERJ6GMYJ102	M. RESISTOR CH 1/10W 1K	1	
R2510	ERJ6GMYJ105	M. RESISTOR CH 1/10W 1M	1	
R2513	ERJ6GMYJ274	M. RESISTOR CH 1/10W 270	1	
R2514	ERJ6GMYJ103	M. RESISTOR CH 1/10W 10K	1	
R2517	ERDS1TJ1R2	C. RESISTOR 1/2W 1. 2	1	
R2518	ERDS1TJ1R5	C. RESISTOR 1/2W 1. 5	1	
R2519	ERDS2TJ330	C. RESISTOR 1/4W 33	1	
R3001	ERJ6GMYJ183	M. RESISTOR CH 1/10W 18K	1	
R3002	ERJ6GMYG301	M. RESISTOR CH 1/10W 300	1	
R3004	ERJ6GMYJ472	M. RESISTOR CH 1/10W 4. 7K	1	
R3005	ERJ6GMZ0R00	M. RESISTOR CH 1/10W 0	1	
R3007	ERJ6GMZ0R00	M. RESISTOR CH 1/10W 0	1	
R3008	ERJ6GMYJ152	M. RESISTOR CH 1/10W 1. 5K	1	
R3009	ERJ6GMYJ101	M. RESISTOR CH 1/10W 100	1	
R3010	ERJ6GMYJ473	M. RESISTOR CH 1/10W 47K	1	
R3011, 12	ERJ6GMYJ101	M. RESISTOR CH 1/10W 100	2	
R3020	ERJ6GMZ0R00	M. RESISTOR CH 1/10W 0	1	
R3021	ERJ6GMYJ684	M. RESISTOR CH 1/10W 680K	1	
R3022	ERJ6GMYJ224	M. RESISTOR CH 1/10W 220K	1	
R3023	ERJ6GMYJ332	M. RESISTOR CH 1/10W 3. 3K	1	
R3024	ERJ6GMYG271	M. RESISTOR CH 1/10W 270	1	
R3025	ERJ6GMYG102	M. RESISTOR CH 1/10W 1K	1	

Ref. No.	Part No.	Part Name & Description	Pcs	Remarks
R3026	ERJ6GMYG152	M. RESISTOR CH 1/10W 1. 5K	1	
R3027	ERJ6GMYJ562	M. RESISTOR CH 1/10W 5. 6K	1	
R3028	ERJ6GMYG152	M. RESISTOR CH 1/10W 1. 5K	1	
R3029	ERJ6GMYG331	M. RESISTOR CH 1/10W 330	1	
R3030	ERJ6GMYJ123	M. RESISTOR CH 1/10W 12K	1	
R3031	ERJ6GMYJ225	M. RESISTOR CH 1/10W 2. 2M	1	
R3032	ERJ6GMYG391	M. RESISTOR CH 1/10W 390	1	
R3033	ERJ6GMYG471	M. RESISTOR CH 1/10W 470	1	
R3034	ERJ6GMYG561	M. RESISTOR CH 1/10W 560	1	
R3035	ERJ6GMYG271	M. RESISTOR CH 1/10W 270	1	
R3036	ERJ6GMYJ272	M. RESISTOR CH 1/10W 2. 7K	1	
R3040	ERJ6GMZ0R00	M. RESISTOR CH 1/10W 0	1	
R3505	ERJ6GMYJ101	M. RESISTOR CH 1/10W 100	1	
R4001	ERJ6GMYG334	M. RESISTOR CH 1/10W 330K	1	
R4002	ERJ6GMYG103	M. RESISTOR CH 1/10W 10K	1	
R4003	ERJ6GMYJ753	M. RESISTOR CH 1/10W 75K	1	
R4004	ERJ6GMYJ153	M. RESISTOR CH 1/10W 15K	1	
R4005	ERJ6GMYG241	M. RESISTOR CH 1/10W 240	1	
R4006	ERJ6GMYJ223	M. RESISTOR CH 1/10W 22K	1	
R4007	ERJ6GMYJ472	M. RESISTOR CH 1/10W 4. 7K	1	
R4008	ERJ6GMYJ222	M. RESISTOR CH 1/10W 2. 2K	1	
R4009	ERJ6GMYJ181	M. RESISTOR CH 1/10W 180	1	
R4010	ERJ6GMYJ391	M. RESISTOR CH 1/10W 390	1	
R4011	ERJ6GMYJ392	M. RESISTOR CH 1/10W 3. 9K	1	
R4012	ERJ6GMZ0R00	M. RESISTOR CH 1/10W 0	1	
R4014	ERJ6GMYK225	M. RESISTOR CH 1/10W 2. 2M	1	
R4015	ERJ6GMYJ272	M. RESISTOR CH 1/10W 2. 7K	1	
R4016	ERJ6GMYJ182	M. RESISTOR CH 1/10W 1. 8K	1	
R4019	ERJ6GMYJ101	M. RESISTOR CH 1/10W 100	1	
R4036	ERJ6GMYJ682	M. RESISTOR CH 1/10W 6. 8K	1	
R4037	ERJ6GMYJ222	M. RESISTOR CH 1/10W 2. 2K	1	
R4038, 39	ERJ6GMYJ154	M. RESISTOR CH 1/10W 150K	2	
R4049	ERJ6GMYJ473	M. RESISTOR CH 1/10W 47K	1	
R4060	ERJ6GMYJ822	M. RESISTOR CH 1/10W 8. 2K	1	
R4061	ERJ6GMYJ332	M. RESISTOR CH 1/10W 3. 3K	1	
R4062	ERJ6GMYJ272	M. RESISTOR CH 1/10W 2. 7K	1	
R4063	ERJ6GMYJ332	M. RESISTOR CH 1/10W 3. 3K	1	
R4067	ERJ6GMYJ682	M. RESISTOR CH 1/10W 6. 8K	1	
R4068	ERJ6GMYJ222	M. RESISTOR CH 1/10W 2. 2K	1	
R4069, 70	ERJ6GMYJ154	M. RESISTOR CH 1/10W 150K	2	
R4071	ERJ6GMYJ103	M. RESISTOR CH 1/10W 10K	1	
R4072	ERJ6GMYJ224	M. RESISTOR CH 1/10W 220K	1	
R4073	ERJ6GMYJ472	M. RESISTOR CH 1/10W 4. 7K	1	
R4503-06	ERJ6GMYJ753	M. RESISTOR CH 1/10W 75K	4	
R4509	ERJ6GMYK335	M. RESISTOR CH 1/10W 3. 3M	1	
R4510	ERJ6GMYJ221	M. RESISTOR CH 1/10W 220	1	
R4512	ERJ6GMYJ221	M. RESISTOR CH 1/10W 220	1	
R4514	ERJ6GMYJ221	M. RESISTOR CH 1/10W 220	1	
R4516, 17	ERJ6GMYJ104	M. RESISTOR CH 1/10W 100K	2	
R4518, 19	ERJ6GMYJ221	M. RESISTOR CH 1/10W 220	2	
R4520	ERJ6GMYJ223	M. RESISTOR CH 1/10W 22K	1	
R4521	ERJ6GMYJ393	M. RESISTOR CH 1/10W 39K	1	
R4522	ERJ6GMYJ332	M. RESISTOR CH 1/10W 3. 3K	1	
R4523	ERJ6RBD393	M. RESISTOR CH 1/10W 39K	1	[SUPPLIED FROM MBV]
R4524	ERJ6GMYJ332	M. RESISTOR CH 1/10W 3. 3K	1	
R4525	ERJ6GMYJ393	M. RESISTOR CH 1/10W 39K	1	
R4526	ERJ6GMYJ221	M. RESISTOR CH 1/10W 220	1	
R4527	ERJ6GMYJ103	M. RESISTOR CH 1/10W 10K	1	
R4528	ERJ6GMYJ102	M. RESISTOR CH 1/10W 1K	1	
R4529, 30	ERJ6GMYJ391	M. RESISTOR CH 1/10W 390	2	
R4539	ERJ6GMYJ223	M. RESISTOR CH 1/10W 22K	1	
R4901, 02	ERJ6GMYJ331	M. RESISTOR CH 1/10W 330	2	
R4905	ERDS2TJ471	C. RESISTOR 1/4W 470	1	
R4907, 08	ERJ6GMYJ221	M. RESISTOR CH 1/10W 220	2	
R4911	ERJ6GMYJ221	M. RESISTOR CH 1/10W 220	1	
R4912	ERJ6GMYJ472	M. RESISTOR CH 1/10W 4. 7K	1	
R4913	ERJ6GMYJ153	M. RESISTOR CH 1/10W 15K	1	
R4915	ERJ6GMYJ223	M. RESISTOR CH 1/10W 22K	1	
R4916	ERJ6GMYJ471	M. RESISTOR CH 1/10W 470	1	
R4921	ERJ6GMYJ331	M. RESISTOR CH 1/10W 330	1	
R4923	ERJ6GMYJ331	M. RESISTOR CH 1/10W 330	1	
R4924, 25	ERJ6GMYJ750	M. RESISTOR CH 1/10W 75	2	
R4926, 27	ERJ6GMYJ473	M. RESISTOR CH 1/10W 47K	2	
R4928, 29	ERJ6GMYJ750	M. RESISTOR CH 1/10W 75	2	
R4931	ERJ6GMYJ103	M. RESISTOR CH 1/10W 10K	1	

Ref.No.	Part No.	Part Name & Description	Pcs	Remarks
R4933	ERJ6GMYJ911	M.RESISTOR CH 1/10W 910	1	
R4934	ERJ6GMYJ102	M.RESISTOR CH 1/10W 1K	1	
R6001	ERJ6GMYJ562	M.RESISTOR CH 1/10W 5.6K	1	
R6002, 03	ERJ6GMYJ102	M.RESISTOR CH 1/10W 1K	2	
R6005	ERJ6GMYJ103	M.RESISTOR CH 1/10W 10K	1	
R6006	ERJ6GMYJ102	M.RESISTOR CH 1/10W 1K	1	
R6007	ERJ6GMYJ273	M.RESISTOR CH 1/10W 27K	1	
R6008	ERJ6GMYJ224	M.RESISTOR CH 1/10W 220K	1	
R6010	ERJ6GMYJ153	M.RESISTOR CH 1/10W 15K	1	
R6011	ERJ6GMYJ103	M.RESISTOR CH 1/10W 10K	1	
R6012, 13	ERJ6GMYJ472	M.RESISTOR CH 1/10W 4.7K	2	
R6014	ERJ6GMZOROO	M.RESISTOR CH 1/10W 0	1	
R6015	ERJ6GMYJ103	M.RESISTOR CH 1/10W 10K	1	
R6016	ERJ6GMYJ153	M.RESISTOR CH 1/10W 15K	1	
R6017	ERJ6GMYJ682	M.RESISTOR CH 1/10W 6.8K	1	
R6018	ERDS2TJ221	C.RESISTOR 1/4W 220	1	
R6020	ERJ6GMYJ102	M.RESISTOR CH 1/10W 1K	1	
R6022	ERJ6GMYJ102	M.RESISTOR CH 1/10W 1K	1	
R6023-30	ERJ6GMYJ221	M.RESISTOR CH 1/10W 220	8	
R6031	ERJ6GMYJ273	M.RESISTOR CH 1/10W 27K	1	
R6032	ERJ6GMYJ393	M.RESISTOR CH 1/10W 39K	1	
R6033	ERJ6GMYJ273	M.RESISTOR CH 1/10W 27K	1	
R6036	ERJ6GMYJ101	M.RESISTOR CH 1/10W 100	1	
R6038	ERJ6GMYJ433	M.RESISTOR CH 1/10W 43K	1	
R6039	ERJ6GMYJ393	M.RESISTOR CH 1/10W 39K	1	
R7302	ERJ3GEYOROO	M.RESISTOR CH 1/16W 0	1	
R7305, 06	ERJ6GEYJ101	M.RESISTOR CH 1/10W 100	2	
R7316	ERJ3GEYJ103	M.RESISTOR CH 1/16W 10K	1	
R7324	ERJ3GEYJ221	M.RESISTOR CH 1/16W 220	1	
R7325	ERJ3GEYOROO	M.RESISTOR CH 1/16W 0	1	
R7327	ERJ3GEYJ822	M.RESISTOR CH 1/16W 8.2K	1	
R7328, 29	ERJ3GEYJ221	M.RESISTOR CH 1/16W 220	2	
R7501	ERDS2TJ150	C.RESISTOR 1/4W 15	1	
R7502	ERJ6GMYJ101	M.RESISTOR CH 1/10W 100	1	
R7503, 04	ERJ6GMYJ202	M.RESISTOR CH 1/10W 2K	2	
R7505	ERJ6GMZOROO	M.RESISTOR CH 1/10W 0	1	
R7506-08	ERJ6GMYJ332	M.RESISTOR CH 1/10W 3.3K	3	
R7509	ERJ6GMYJ822	M.RESISTOR CH 1/10W 8.2K	1	
R7510	ERJ6GMYJ562	M.RESISTOR CH 1/10W 5.6K	1	
R7511	ERJ6GMYJ432	M.RESISTOR CH 1/10W 4.3K	1	
R7512, 13	ERJ6GMYJ103	M.RESISTOR CH 1/10W 10K	2	
R7514	ERJ6GMYJ822	M.RESISTOR CH 1/10W 8.2K	1	
R7515	ERJ6GMYJ562	M.RESISTOR CH 1/10W 5.6K	1	
R7516	ERJ6GMYJ432	M.RESISTOR CH 1/10W 4.3K	1	
R7517	ERJ6GMYJ103	M.RESISTOR CH 1/10W 10K	1	
R7520, 21	ERJ6GMYJ223	M.RESISTOR CH 1/10W 22K	2	
R7522	ERJ6GMYJ181	M.RESISTOR CH 1/10W 180	1	
R7523-26	ERJ6GMYJ303	M.RESISTOR CH 1/10W 30K	4	
R7538	ERJ6GMYJ432	M.RESISTOR CH 1/10W 4.3K	1	
R7549	ERDS2TJ150	C.RESISTOR 1/4W 15	1	
R7601, 02	ERJ6GMYJ101	M.RESISTOR CH 1/10W 100	2	
R7603	ERJ6GMYJ102	M.RESISTOR CH 1/10W 1K	1	
R7606, 07	ERJ6GMYJ101	M.RESISTOR CH 1/10W 100	2	
R7608, 09	ERDS2TJ331	C.RESISTOR 1/4W 330	2	
R7610	ERJ6GMYJ151	M.RESISTOR CH 1/10W 150	1	
R7612	ERJ6GMZOROO	M.RESISTOR CH 1/10W 0	1	
R7613	ERJ6GMYJ151	M.RESISTOR CH 1/10W 150	1	
R7614	ERJ6GMYJ561	M.RESISTOR CH 1/10W 560	1	
R7615	ERJ6GMYJ103	M.RESISTOR CH 1/10W 10K	1	
R7620	ERJ6GMYJ104	M.RESISTOR CH 1/10W 100K	1	
R7621	ERJ6GMYJ182	M.RESISTOR CH 1/10W 1.8K	1	
R7622, 23	ERJ6GMYJ154	M.RESISTOR CH 1/10W 150K	2	
R7704	ERJ6GMYJ472	M.RESISTOR CH 1/10W 4.7K	1	
R7705	ERJ6GMYJ473	M.RESISTOR CH 1/10W 47K	1	
R7707	ERJ6GMYJ471	M.RESISTOR CH 1/10W 470	1	
R7708-10	ERJ6GMYJ511	M.RESISTOR CH 1/10W 510	3	
R7711	ERJ6GMYJ104	M.RESISTOR CH 1/10W 100K	1	
R7712	ERJ6GMYJ102	M.RESISTOR CH 1/10W 1K	1	
R7713	ERJ6GMYJ104	M.RESISTOR CH 1/10W 100K	1	
R7714	ERJ6GMYG153	M.RESISTOR CH 1/10W 15K	1	
R7715	ERJ6GMYG152	M.RESISTOR CH 1/10W 1.5K	1	
R7716	ERJ6GMYG562	M.RESISTOR CH 1/10W 5.6K	1	
R7729	ERJ6GMYJ102	M.RESISTOR CH 1/10W 1K	1	
R7730	ERJ6GMYJ332	M.RESISTOR CH 1/10W 3.3K	1	
R7740	ERJ6GMYJ472	M.RESISTOR CH 1/10W 4.7K	1	

Ref.No.	Part No.	Part Name & Description	Pcs	Remarks
R7741-44	ERJ6GMYJ101	M.RESISTOR CH 1/10W 100	4	
R7746	ERJ6GMYJ101	M.RESISTOR CH 1/10W 100	1	
R7751, 52	ERJ6GMYJ101	M.RESISTOR CH 1/10W 100	2	
R7753	ERJ6GMYJ272	M.RESISTOR CH 1/10W 2.7K	1	
R7754-57	ERJ6GMYJ101	M.RESISTOR CH 1/10W 100	4	
R7759	ERJ6GMYJ222	M.RESISTOR CH 1/10W 2.2K	1	
R7760	ERJ6GMZOROO	M.RESISTOR CH 1/10W 0	1	
R7761	ERJ6GMYJ472	M.RESISTOR CH 1/10W 4.7K	1	
R7765-67	ERJ6GMYJ101	M.RESISTOR CH 1/10W 100	3	
R7768	ERJ6GMYJ472	M.RESISTOR CH 1/10W 4.7K	1	
R7769	ERJ6GMYJ101	M.RESISTOR CH 1/10W 100	1	
R7770	ERJ6GMYJ472	M.RESISTOR CH 1/10W 4.7K	1	
R7771-78	ERJ6GMYJ101	M.RESISTOR CH 1/10W 100	8	
R7784, 85	ERJ6GMYJ472	M.RESISTOR CH 1/10W 4.7K	2	
R7792-99	ERJ6GMYJ101	M.RESISTOR CH 1/10W 100	8	
R7802, 03	ERJ6GMZOROO	M.RESISTOR CH 1/10W 0	2	
R7804, 05	ERJ6GMYJ102	M.RESISTOR CH 1/10W 1K	2	
R7807	ERJ6GMYJ102	M.RESISTOR CH 1/10W 1K	1	
R7809	ERJ6GMYJ472	M.RESISTOR CH 1/10W 4.7K	1	
S1501	VSS0520-3	MODE SELECT SWITCH	1	[SUPPLIED FROM MBV]
S7501	VES0834	S-TAB SWITCH	1	
S7502-06	EVQ11L07B	SWITCH	5	
T0701	EQV5EC083P	TRANSFORMER	1	[SUPPLIED FROM MBV]
T4001	EQQ7QF024P	TRANSFORMER	1	
⚠ TU7601	ENG47309G1	TUNER	1	[SUPPLIED FROM MBV]
VR0701	EVNCBAA00B14	V.RESISTOR	1	
X0701	VLF1417	FILTER	1	[SUPPLIED FROM MBV]
X0704	VLF1495	FILTER	1	[SUPPLIED FROM MBV]
X3001	VSX0162	CRYSTAL OSCILLATOR	1	
X6001	VSX0830	CRYSTAL OSCILLATOR	1	
X6002	VSX0660	CRYSTAL OSCILLATOR	1	
X7302	VSX0953	CRYSTAL OSCILLATOR	1	
X7701	VSX1043	CRYSTAL OSCILLATOR	1	
		MISCELLANEOUS		
	VSC4999	SHIELD CASE (MIDDLE)	1	[SUPPLIED FROM MBV]
	VSC4998	HA ANGLE	1	[SUPPLIED FROM MBV]
	VXQ0648	FIP HOLDER	1	
	VSC4752	SHIELD CASE (MAIN)	1	FOR NICAM DECODER C.B.A.
	VMP5897	CONNECTING ANGLE	1	FOR TV DEMODULATOR C.B.A.
■	VEP06D25D	MAIN C.B.A.		[SUPPLIED FROM MBV]
				(RTL) NV-FJ610EC-S/ECMS
				NV-FJ610EC-K/ECMK
				NV-FJ603EP-K
				NV-FJ606EC-K/ECMK
				NV-FJ604ECMK
C0701	ECUM1C105ZFN	C.CAPACITOR CH 16V 1U	1	
C0702	ECUX1H102KBV	C.CAPACITOR CH 50V 1000P	1	
C0703	ECUM1A105KBN	C.CAPACITOR CH 10V 1U	1	
C0704	ECUM1E333KBN	C.CAPACITOR CH 25V 0.033U	1	
C0706	ECEA1HKA010	E.CAPACITOR 50V 1U	1	
C0707	ECEA1HKA2R2	E.CAPACITOR 50V 2.2U	1	
C0708	ECEA1HKAR47	E.CAPACITOR 50V 0.47U	1	
C0710	ECUX1H103ZFV	C.CAPACITOR CH 50V 0.01U	1	
C0711	ECEA1CKA220	E.CAPACITOR 16V 22U	1	
C0712	ECUX1C104ZFV	C.CAPACITOR CH 16V 0.1U	1	
C0713	EEUFA1A391	E.CAPACITOR 10V 390U	1	
C0714	ECUM1C105ZFN	C.CAPACITOR CH 16V 1U	1	
C0715	ECUX1H030CCV	C.CAPACITOR CH 50V 3P	1	
C0716	ECUX1H123KBV	C.CAPACITOR CH 50V 0.012U	1	
C0717	ECUM1H330GUV	C.CAPACITOR CH 50V 33P	1	
C0719	ECUX1E104ZFV	C.CAPACITOR CH 25V 0.1U	1	
C0721	ECUX1H181JCV	C.CAPACITOR CH 50V 180P	1	
C0724	ECUX1H221KBV	C.CAPACITOR CH 50V 220P	1	
C1001	ECEA1AKG220	E.CAPACITOR 10V 22U	1	[SUPPLIED FROM MBV]
C1002	ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	
C1003	ECEA1CGE470	E.CAPACITOR 16V 47U	1	

Ref. No.	Part No.	Part Name & Description	Pcs	Remarks
C1004	ECUM1H103ZFN	C. CAPACITOR CH 50V 0. 01U	1	
C1005	ECEA1AKA470	E. CAPACITOR 10V 47U	1	
C1006, 07	ECUM1H103ZFN	C. CAPACITOR CH 50V 0. 01U	2	
C1008	ECA1CAK470X	E. CAPACITOR 16V 47U	1	
C1009	ECEA0JKA470	E. CAPACITOR 6. 3V 47U	1	
C1010	ECEA1CGE470	E. CAPACITOR 16V 47U	1	
C1011, 12	ECEA1CKA100	E. CAPACITOR 16V 10U	2	
C1015	ECUM1H102KBN	C. CAPACITOR CH 50V 1000P	1	
C1016	ECA1CAK100X	E. CAPACITOR 16V 10U	1	
C1017	ECEA1HKA4R7	E. CAPACITOR 50V 4. 7U	1	
C1201	ECEA0JKA101	E. CAPACITOR 6. 3V 100U	1	
C1202	ECUM1H103ZFN	C. CAPACITOR CH 50V 0. 01U	1	
C1203	ECEA1AKA220	E. CAPACITOR 10V 22U	1	
C1204	ECUM1H103ZFN	C. CAPACITOR CH 50V 0. 01U	1	
C1205	ECEA0JKA470	E. CAPACITOR 6. 3V 47U	1	
C1206, 07	ECUM1E104KBN	C. CAPACITOR CH 25V 0. 1U	2	
C1208	ECUM1H103ZFN	C. CAPACITOR CH 50V 0. 01U	1	
C1501	ECUM1H221JCN	C. CAPACITOR CH 50V 220P	1	
C2501	ECUM1C474ZFN	C. CAPACITOR CH 16V 0. 47U	1	
C2502	ECEA1VKN4R7	E. CAPACITOR 35V 4. 7U	1	
C2503	ECUM1H563ZFN	C. CAPACITOR CH 50V 0. 056U	1	
C2504	ECEA1EKA470	E. CAPACITOR 25V 47U	1	
C2505	ECUM1H330JCN	C. CAPACITOR CH 50V 33P	1	
C2506	ECEA0JKN220	E. CAPACITOR 6. 3V 22U	1	
C2507	ECUM1H104ZFN	C. CAPACITOR CH 50V 0. 1U	1	
C2508	ECEA1EKA4R7	E. CAPACITOR 25V 4. 7U	1	
C2509, 10	ECUM1H563ZFN	C. CAPACITOR CH 50V 0. 056U	2	
C2511	ECEA1VKN4R7	E. CAPACITOR 35V 4. 7U	1	
C2512	ECUM1H392KBN	C. CAPACITOR CH 50V 3900P	1	
C2516	ECEA0JKA221	E. CAPACITOR 6. 3V 220U	1	
C2518	ECUM1H473ZFN	C. CAPACITOR CH 50V 0. 047U	1	
C2521	ECEA1EKA470	E. CAPACITOR 25V 47U	1	
C2522	ECUM1E683KBN	C. CAPACITOR CH 25V 0. 068U	1	
C2523-25	ECUM1C154KBN	C. CAPACITOR CH 16V 0. 15U	3	
C2526	ECEA1VKN4R7	E. CAPACITOR 35V 4. 7U	1	
C2535, 36	ECUM1H104ZFN	C. CAPACITOR CH 50V 0. 1U	2	
C3002, 03	ECUM1H102KBN	C. CAPACITOR CH 50V 1000P	2	
C3004	ECEA1HKA010	E. CAPACITOR 50V 1U	1	
C3005	ECUM1H680JCN	C. CAPACITOR CH 50V 68P	1	
C3006	ECUM1H060DCN	C. CAPACITOR CH 50V 6P	1	
C3007	ECUM1E104KBN	C. CAPACITOR CH 25V 0. 1U	1	
C3008	ECUM1H103ZFN	C. CAPACITOR CH 50V 0. 01U	1	
C3011	ECEA0JKA221	E. CAPACITOR 6. 3V 220U	1	
C3012, 13	ECUM1H104ZFN	C. CAPACITOR CH 50V 0. 1U	2	
C3014	ECUM1H103ZFN	C. CAPACITOR CH 50V 0. 01U	1	
C3015	ECEA1HKA010	E. CAPACITOR 50V 1U	1	
C3016	ECUM1H333KBN	C. CAPACITOR CH 50V 0. 033U	1	
C3017	ECUM1H104ZFN	C. CAPACITOR CH 50V 0. 1U	1	
C3018	ECEA0JKA101	E. CAPACITOR 6. 3V 100U	1	
C3019	ECUM1E104KBN	C. CAPACITOR CH 25V 0. 1U	1	
C3020	ECUM1H222KBN	C. CAPACITOR CH 50V 2200P	1	
C3021	ERJ6GMZ0R00	M. RESISTOR CH 1/10W 0	1	
C3024	ECEA0JKA470	E. CAPACITOR 6. 3V 47U	1	
C3025	ECEA0JKA101	E. CAPACITOR 6. 3V 100U	1	
C3026	ECUM1H104ZFN	C. CAPACITOR CH 50V 0. 1U	1	
C3029	ECUM1H103ZFN	C. CAPACITOR CH 50V 0. 01U	1	
C3030	ECUM1H222KBN	C. CAPACITOR CH 50V 2200P	1	
C3031	ECEA1HKAR47	E. CAPACITOR 50V 0. 47U	1	
C3033	ECEA1EKN4R7	E. CAPACITOR 25V 4. 7U	1	
C3034	ECEA1EKA4R7	E. CAPACITOR 25V 4. 7U	1	
C3035	ECUM1H104ZFN	C. CAPACITOR CH 50V 0. 1U	1	
C3036	ECEA0JKA221	E. CAPACITOR 6. 3V 220U	1	
C3037	ECUM1H104ZFN	C. CAPACITOR CH 50V 0. 1U	1	
C3038	ECEA0JKA101	E. CAPACITOR 6. 3V 100U	1	
C3039	ECEA0JKA220	E. CAPACITOR 6. 3V 22U	1	
C3040	ECUM1H223KBN	C. CAPACITOR CH 50V 0. 022U	1	
C3041	ECEA1CKA100	E. CAPACITOR 16V 10U	1	
C3042	ECUM1H560JCN	C. CAPACITOR CH 50V 56P	1	
C3043	ECUM1H104ZFN	C. CAPACITOR CH 50V 0. 1U	1	
C3044	ECUM1H821JCN	C. CAPACITOR CH 50V 820P	1	
C3045	ECUM1H221JCN	C. CAPACITOR CH 50V 220P	1	
C3046	ECUM1H220JCN	C. CAPACITOR CH 50V 22P	1	
C3047	ECEA0JKA220	E. CAPACITOR 6. 3V 22U	1	
C3048	ECUM1H560JCN	C. CAPACITOR CH 50V 56P	1	
C3049	ECUM1H681JCN	C. CAPACITOR CH 50V 680P	1	
C3050	ECUM1H680JCN	C. CAPACITOR CH 50V 68P	1	
C3051	ECUM1H220JCN	C. CAPACITOR CH 50V 22P	1	
C3052, 53	ECUM1H104ZFN	C. CAPACITOR CH 50V 0. 1U	2	
C3054, 55	ECUM1E104KBN	C. CAPACITOR CH 25V 0. 1U	2	
C3502	ECUM1H103KBN	C. CAPACITOR CH 50V 0. 01U	1	
C3504	ECUM1H103KBN	C. CAPACITOR CH 50V 0. 01U	1	
C3505	ECEA0JKS470	E. CAPACITOR 6. 3V 47U	1	
C3506	ECUM1H103KBN	C. CAPACITOR CH 50V 0. 01U	1	
C3507-10	ECUM1E104KBN	C. CAPACITOR CH 25V 0. 1U	4	
C4001	ECEA1HKN010	E. CAPACITOR 50V 1U	1	
C4002	ECQB1H822JF	P. CAPACITOR 50V 8200P	1	
C4003	ECEA1HKA010	E. CAPACITOR 50V 1U	1	
C4004	ECEA1EKA4R7	E. CAPACITOR 25V 4. 7U	1	
C4005	ECUM1H272KBN	C. CAPACITOR CH 50V 2700P	1	
C4006	ECEA0JKA220	E. CAPACITOR 6. 3V 22U	1	
C4007	ECUM1H122JCN	C. CAPACITOR CH 50V 1200P	1	[SUPPLIED FROM MBV]
C4010, 11	ECUM1H153KBN	C. CAPACITOR CH 50V 0. 015U	2	
C4012	ECEA1HKA010	E. CAPACITOR 50V 1U	1	
C4013	ECEA0JKA470	E. CAPACITOR 6. 3V 47U	1	
C4014	ECEA1HKA0R1	E. CAPACITOR 50V 0. 1U	1	
C4015	ECEA0JKA220	E. CAPACITOR 6. 3V 22U	1	
C4016	ECEA1HKA0R1	E. CAPACITOR 50V 0. 1U	1	
C4018	ECUM1H104ZFN	C. CAPACITOR CH 50V 0. 1U	1	
C4019	ECEA0JKA470	E. CAPACITOR 6. 3V 47U	1	
C4045	ECUM1H103KBN	C. CAPACITOR CH 50V 0. 01U	1	
C4046-48	ECA1CAK100X	E. CAPACITOR 16V 10U	3	
C4068	ECQB1H223JF	P. CAPACITOR 50V 0. 022U	1	
C4070	ECUM1H221JCN	C. CAPACITOR CH 50V 220P	1	
C4072	ECEA0JKA221	E. CAPACITOR 6. 3V 220U	1	
C4073	ECUM1H223KBN	C. CAPACITOR CH 50V 0. 022U	1	
C4074	ECUM1H152JCN	C. CAPACITOR CH 50V 1500P	1	
C4075	ECEA1AKA220	E. CAPACITOR 10V 22U	1	
C4501, 02	ECEA1HKNR47	E. CAPACITOR 50V 0. 47U	2	
C4505-08	ECA1HAKR22X	E. CAPACITOR 50V 0. 22U	4	[SUPPLIED FROM MBV]
C4511, 12	ECEA1CKA100	E. CAPACITOR 16V 10U	2	
C4513-16	ECA1CAK100X	E. CAPACITOR 16V 10U	4	
C4517	ECEA1CKA100	E. CAPACITOR 16V 10U	1	
C4518	ECEA1HKAR22	E. CAPACITOR 50V 0. 22U	1	
C4519	ECA1CAK100X	E. CAPACITOR 16V 10U	1	
C4520	ECQB1H562JF	P. CAPACITOR 50V 5600P	1	
C4521	ECA1CAK470X	E. CAPACITOR 16V 47U	1	
C4522	ECA1CAK100X	E. CAPACITOR 16V 10U	1	
C4523	ECA1HAK2R2X	E. CAPACITOR 50V 2. 2U	1	[SUPPLIED FROM MBV]
C4524	ECA1CAK100X	E. CAPACITOR 16V 10U	1	
C4525	ECA1CAK470X	E. CAPACITOR 16V 47U	1	
C4526	ECQB1H562JF	P. CAPACITOR 50V 5600P	1	
C4527	ECA1CAK100X	E. CAPACITOR 16V 10U	1	
C4528	ECUM1H104ZFN	C. CAPACITOR CH 50V 0. 1U	1	
C4529	ECEA1CKS470	E. CAPACITOR 16V 47U	1	
C4530	ECUM1E104KBN	C. CAPACITOR CH 25V 0. 1U	1	
C4531	ECUM1H103KBN	C. CAPACITOR CH 50V 0. 01U	1	
C4532	ECUM1H561JCN	C. CAPACITOR CH 50V 560P	1	
C4533	ECUM1H104ZFN	C. CAPACITOR CH 50V 0. 1U	1	
C4534	ECEA0JKS331	E. CAPACITOR 6. 3V 330U	1	
C4535	ECUM1H471JCN	C. CAPACITOR CH 50V 470P	1	
C4540	ECUM1H102KBN	C. CAPACITOR CH 50V 1000P	1	
C4901, 02	ECUM1H470JCN	C. CAPACITOR CH 50V 47P	2	
C4903-09	ECUM1H471KBN	C. CAPACITOR CH 50V 470P	7	
C4912, 13	ECUM1H470JCN	C. CAPACITOR CH 50V 47P	2	
C4914	ECUM1H471KBN	C. CAPACITOR CH 50V 470P	1	
C4917	ECUM1E104KBN	C. CAPACITOR CH 25V 0. 1U	1	
C4921	ECUM1E104KBN	C. CAPACITOR CH 25V 0. 1U	1	
C4922	ECEA1CKA470	E. CAPACITOR 16V 47U	1	
C4923	ECUM1E104KBN	C. CAPACITOR CH 25V 0. 1U	1	
C4925	ECUM1H104ZFN	C. CAPACITOR CH 50V 0. 1U	1	
C4926	ECEA1CKA470	E. CAPACITOR 16V 47U	1	
C4927	ECUM1H104ZFN	C. CAPACITOR CH 50V 0. 1U	1	
C4928	ECEA0JKA331	E. CAPACITOR 6. 3V 330U	1	
C4929	ECUM1H104ZFN	C. CAPACITOR CH 50V 0. 1U	1	
C4932	ECUM1H104ZFN	C. CAPACITOR CH 50V 0. 1U	1	
C4933	ECEA1CKA470	E. CAPACITOR 16V 47U	1	
C4935	ECUM1H222KBN	C. CAPACITOR CH 50V 2200P	1	
C4938	ECUM1H222KBN	C. CAPACITOR CH 50V 2200P	1	
C4939	ECUM1H104ZFN	C. CAPACITOR CH 50V 0. 1U	1	
C4940	ECEA0JKA331	E. CAPACITOR 6. 3V 330U	1	

Ref. No.	Part No.	Part Name & Description	Pcs	Remarks
C4941	ECUM1E104KBN	C. CAPACITOR CH 25V 0. 1U	1	
C6001	ECEA0JKA470	E. CAPACITOR 6. 3V 47U	1	
C6002	ECUM1H103ZFN	C. CAPACITOR CH 50V 0. 01U	1	
C6003	ECUM1H200JCN	C. CAPACITOR CH 50V 20P	1	
C6004	ECUM1H120JCN	C. CAPACITOR CH 50V 12P	1	
C6005	ECUM1H103ZFN	C. CAPACITOR CH 50V 0. 01U	1	
C6006	ECUM1H471JCN	C. CAPACITOR CH 50V 470P	1	
C6007, 08	ECUM1H121JCN	C. CAPACITOR CH 50V 120P	2	
C6009	ECUM1H681JCN	C. CAPACITOR CH 50V 680P	1	
C6010	ECUM1H104ZFN	C. CAPACITOR CH 50V 0. 1U	1	
C6011	ECEA0JKA470	E. CAPACITOR 6. 3V 47U	1	
C6012	ECUM1H102KBN	C. CAPACITOR CH 50V 1000P	1	
C6013	ECUM1H180JCN	C. CAPACITOR CH 50V 18P	1	
C6016	ECUM1H180JCN	C. CAPACITOR CH 50V 18P	1	
C6017	ECEA1CKA100	E. CAPACITOR 16V 10U	1	
C6018	ECUM1H102KBN	C. CAPACITOR CH 50V 1000P	1	
C6019	ECUM1H151JCN	C. CAPACITOR CH 50V 150P	1	
C6022	ECUM1H103ZFN	C. CAPACITOR CH 50V 0. 01U	1	
C7302	VCEA0JAW101	E. CAPACITOR 6. 3V 100U	1	
C7303	ECUX1H103ZFV	C. CAPACITOR CH 50V 0. 01U	1	
C7304	VCEA0JAW101	E. CAPACITOR 6. 3V 100U	1	
C7305, 06	ECUX1H330JCV	C. CAPACITOR CH 50V 33P	2	
C7307	ECUX1H103ZFV	C. CAPACITOR CH 50V 0. 01U	1	
C7308	ECEA1HKA2R2	E. CAPACITOR 50V 2. 2U	1	
C7311	ERJ3GEY0R00	M. RESISTOR CH 1/16W 0	1	
C7312, 13	ECUX1C104ZFV	C. CAPACITOR CH 16V 0. 1U	2	
C7315	ECUM1E104KBN	C. CAPACITOR CH 25V 0. 1U	1	
C7316	ECUX1C104ZFV	C. CAPACITOR CH 16V 0. 1U	1	
C7317	VCEA1CAW100	E. CAPACITOR 16V 10U	1	
C7318	VCEA0JAW470	E. CAPACITOR 6. 3V 47U	1	
C7319, 20	VCEA1CAW100	E. CAPACITOR 16V 10U	2	
C7324, 25	ECUX1C104ZFV	C. CAPACITOR CH 16V 0. 1U	2	
C7341, 42	ECUX1H472KBV	C. CAPACITOR CH 50V 4700P	2	
C7501	ECUM1H103ZFN	C. CAPACITOR CH 50V 0. 01U	1	
C7502	ECEA1HKA100	E. CAPACITOR 50V 10U	1	
C7503	ECUM1H120JCN	C. CAPACITOR CH 50V 12P	1	
C7504	ECEA0JKA101	E. CAPACITOR 6. 3V 100U	1	
C7505	ECUM1H104ZFN	C. CAPACITOR CH 50V 0. 1U	1	
C7506	VCE0073	SUPER CAPACITOR	1	
C7507	ECEA0JKA221	E. CAPACITOR 6. 3V 220U	1	
C7508	ECUM1H683ZFN	C. CAPACITOR CH 50V 0. 068U	1	
C7509	ECUM1H103ZFN	C. CAPACITOR CH 50V 0. 01U	1	
C7601	ECEA0JKA101	E. CAPACITOR 6. 3V 100U	1	
C7602	ECUM1H221JCN	C. CAPACITOR CH 50V 220P	1	
C7603	ECEA0JKA101	E. CAPACITOR 6. 3V 100U	1	
C7605, 06	ECUM1H330JCN	C. CAPACITOR CH 50V 33P	2	
C7607	ECEA0JKA101	E. CAPACITOR 6. 3V 100U	1	
C7608	ECUM1H103ZFN	C. CAPACITOR CH 50V 0. 01U	1	
C7610	ECEA1HKA100	E. CAPACITOR 50V 10U	1	
C7611	ECUM1H104ZFN	C. CAPACITOR CH 50V 0. 1U	1	
C7612	ECUM1H221JCN	C. CAPACITOR CH 50V 220P	1	
C7613	ERJ6GMZ0R00	M. RESISTOR CH 1/10W 0	1	
C7615	ECQV1H104JM	P. CAPACITOR 50V 0. 1U	1	
C7618	ECUM1E104KBN	C. CAPACITOR CH 25V 0. 1U	1	
C7619	ECUM1H104ZFN	C. CAPACITOR CH 50V 0. 1U	1	
C7620, 21	ECA1HAK2R2X	E. CAPACITOR 50V 2. 2U	2	[SUPPLIED FROM MBV]
C7623	ECUM1H330JCN	C. CAPACITOR CH 50V 33P	1	
C7701, 02	ECUM1H104ZFN	C. CAPACITOR CH 50V 0. 1U	2	
C7705	ECUM1H104ZFN	C. CAPACITOR CH 50V 0. 1U	1	
C7708	ECUM1H104ZFN	C. CAPACITOR CH 50V 0. 1U	1	
C7709	ECEA0JKA470	E. CAPACITOR 6. 3V 47U	1	
C7711	ECUM1C105ZFN	C. CAPACITOR CH 16V 1U	1	
C7712, 13	ECUM1H103ZFN	C. CAPACITOR CH 50V 0. 01U	2	
C7714	ECUM1H470JCN	C. CAPACITOR CH 50V 47P	1	
C7715	ECUM1C105ZFN	C. CAPACITOR CH 16V 1U	1	
C7716	ECUM1H471JCN	C. CAPACITOR CH 50V 470P	1	
C7717	ECUM1C105ZFN	C. CAPACITOR CH 16V 1U	1	
C7718	ECUM1H471JCN	C. CAPACITOR CH 50V 470P	1	
C7720	ECEA0JKA470	E. CAPACITOR 6. 3V 47U	1	
C7721	ECEA1EKA4R7	E. CAPACITOR 25V 4. 7U	1	
C7722, 23	ECUM1H104ZFN	C. CAPACITOR CH 50V 0. 1U	2	
C7728	ECEA1EKA4R7	E. CAPACITOR 25V 4. 7U	1	
C7729	ECUM1H104ZFN	C. CAPACITOR CH 50V 0. 1U	1	
C7730	ECEA0JKA101	E. CAPACITOR 6. 3V 100U	1	
C7731	ECUM1H820JCN	C. CAPACITOR CH 50V 82P	1	

Ref. No.	Part No.	Part Name & Description	Pcs	Remarks
C7735, 36	ECUM1H104ZFN	C. CAPACITOR CH 50V 0. 1U	2	
C7739	ECUM1H104ZFN	C. CAPACITOR CH 50V 0. 1U	1	
C7740	ECEA0JKA470	E. CAPACITOR 6. 3V 47U	1	
C7742	ECUM1H104ZFN	C. CAPACITOR CH 50V 0. 1U	1	
C7749, 50	ECUM1H270JCN	C. CAPACITOR CH 50V 27P	2	
C7752	ECEA0JKA470	E. CAPACITOR 6. 3V 47U	1	
C7802	ECEA0JKA470	E. CAPACITOR 6. 3V 47U	1	
C7803	ECUM1C105ZFN	C. CAPACITOR CH 16V 1U	1	
C7804	ECUM1H221JCN	C. CAPACITOR CH 50V 220P	1	
D0702	MA77	DIODE	1	
D1003	1SS254	DIODE	1	
D1004	MA4051N-H	DIODE	1	
D1006	MA4051N-L	DIODE	1	
D1009	MA4051N-M	DIODE	1	
D1010	1SS254	DIODE	1	
D1015, 16	1SS254	DIODE	2	
D1017	MA4120N-M	DIODE	1	[SUPPLIED FROM MBV]
D1018	1SS254	DIODE	1	
D1501	SIR505S	DIODE	1	
D2501, 02	1SS254	DIODE	2	
D3001	1SS254	DIODE	1	
D4905, 06	MA4075-M	DIODE	2	
D6002, 03	MA700	DIODE	2	
D7501	MA4220N-M	DIODE	1	[SUPPLIED FROM MBV]
D7503	RB441P	DIODE	1	
D7601	MA4300M	DIODE	1	
D7603, 04	1SS254	DIODE	2	
DP7501	VSL0533-B	FIP	1	[SUPPLIED FROM MBV]
FL7301	VLF0633	FILTER	1	
IC0701	LA75503	IC	1	[SUPPLIED FROM MBV]
IC1001	PQ20VB2E	IC	1	[SUPPLIED FROM MBV]
IC1201	UPC1093J	IC	1	[SUPPLIED FROM MBV]
IC1501, 02	RPI354N	IC	2	[SUPPLIED FROM MBV]
IC2502	AN3811NK	IC	1	[SUPPLIED FROM MBV]
IC3001	TDA9735HV3	IC	1	[SUPPLIED FROM MBV]
IC3501	AN3368SB	IC	1	[SUPPLIED FROM MBV]
IC4001	NJM4558M	IC	1	
IC4501	TDA9605H	IC	1	[SUPPLIED FROM MBV]
IC4901	LA73021M	IC	1	
IC6001	M3777AVCEZ	IC	1	[SUPPLIED FROM MBV]
IC7301	TDA9874AH	IC	1	[SUPPLIED FROM MBV]
IC7302	PST7043	IC	1	
IC7501	M35502AFP	IC	1	
IC7502	S80743AL	IC	1	
IC7503	PNA4611M02VT	IR RECEIVER UNIT	1	[SUPPLIED FROM MBV]
IC7504	RN5VD28AA	IC	1	[SUPPLIED FROM MBV]
IC7701	M3506SWVAX	IC	1	[SUPPLIED FROM MBV]
IC7703	M3062SVCEY	IC	1	[SUPPLIED FROM MBV]
IC7704	M24C16-WBN6	IC	1	[SUPPLIED FROM MBV]
⚠ IP1001, 02	UNH000300A	IC PROTECTOR	2	
⚠ IP1201, 02	UNH000300A	IC PROTECTOR	2	
JK4901	VJJ0377	RCA JACK	1	[SUPPLIED FROM MBV]
JK4903	VJS3634	21-PIN SCART JACK	1	[SUPPLIED FROM MBV]
K0703	ERJ3GEY0R00	M. RESISTOR CH 1/16W 0	1	
K0707	ERJ3GEY0R00	M. RESISTOR CH 1/16W 0	1	
K0709	ERJ3GEY0R00	M. RESISTOR CH 1/16W 0	1	
K2501	ERJ6GMZ0R00	M. RESISTOR CH 1/10W 0	1	
K2503	ERJ6GMZ0R00	M. RESISTOR CH 1/10W 0	1	
K3003	ERJ6GMZ0R00	M. RESISTOR CH 1/10W 0	1	
K7301-03	ERJ6GEY0R00	M. RESISTOR CH 1/10W 0	3	
K7603	ERJ6GMZ0R00	M. RESISTOR CH 1/10W 0	1	
L0701	ELJNAR18JF	CHIP INDUCTOR	1	[SUPPLIED FROM MBV]
L0703	ELJNA2R2JF	CHIP INDUCTOR	1	
L2503	VLQ0599J680	COIL 68UH	1	
L3001	VLQ0599J220	COIL 22UH	1	
L3003	VLQ0599J470	COIL 47UH	1	
L3004	VLQ0599J680	COIL 68UH	1	

Ref.No.	Part No.	Part Name & Description	Pcs	Remarks
L3005, 06	VLQ0599J101	COIL 100UH	2	
L3007	VLQ0599J330	COIL 33UH	1	
L3008	VLQ0599J470	COIL 47UH	1	
L3009	VLQ0599J390	COIL 39UH	1	
L3010	VLQ0599J560	COIL 56UH	1	
L3501	VLQ0599J330	COIL 33UH	1	
L4001	ELELN153JA	INDUCTOR 15000UH	1	[SUPPLIED FROM MBV]
L4007	VLQ0599J680	COIL 68UH	1	
L4501	VLQ0599J100	COIL 10UH	1	
L4901	VLQ0599JR22	COIL 0.22UH	1	[SUPPLIED FROM MBV]
L4902-04	VLQ0599J680	COIL 68UH	3	
L6001	VLQ0599J101	COIL 100UH	1	
L6002	VLQ0599J2R2	COIL 2.2UH	1	
L7302	VLQ0599J1R0	COIL 1UH	1	
L7601-04	VLQ0599J330	COIL 33UH	4	
L7605	VLQ0599J100	COIL 10UH	1	
L7608	VLQ0599J1R0	COIL 1UH	1	
L7609	VLQ0599J100	COIL 10UH	1	
L7701, 02	VLQ0599J390	COIL 39UH	2	
L7704	VLQ0599J390	COIL 39UH	1	
L7706	VLQ0599J100	COIL 10UH	1	
L7707	VLQ0599J220	COIL 22UH	1	
L7801	VLQ0599J680	COIL 68UH	1	
LB3001, 02	ERJ6GMZ0R00	M.RESISTOR CH 1/10W 0	2	
LB3501-04	VLP0145	COIL	4	
LB4901-04	ERJ6GMYJ221	M.RESISTOR CH 1/10W 220	4	
LB4906, 07	ERJ6GMYJ221	M.RESISTOR CH 1/10W 220	2	
LB7301	ERJ6GEY0R00	M.RESISTOR CH 1/10W 0	1	
LB7303	ERJ6GEY0R00	M.RESISTOR CH 1/10W 0	1	
P1001	VJS3917A016W	CONNECTOR (FEMALE) 16P	1	
P1501	VJS3837A002	CONNECTOR (FEMALE) 2P	1	
P2501	VJP3835A012	CONNECTOR (MALE) 12P	1	
P2502	VJS3537A009G	CONNECTOR (FEMALE) 9P	1	
P3502	VJS3537A010G	CONNECTOR (FEMALE) 10P	1	
P4002	VJS3837A002	CONNECTOR (FEMALE) 2P	1	
P4003	VJS3537A006G	CONNECTOR (FEMALE) 6P	1	
PK0701	VJR0826E009W	CONNECTOR (MALE) 9P	1	
PK7301	VJR0777B007W	CONNECTOR (MALE) 7P	1	
PK7302	VJR0777B006W	CONNECTOR (MALE) 6P	1	
PP0701	VJP3589A004B	CONNECTOR (MALE) 4P	1	
Q0702	2SD601A-S	TRANSISTOR	1	
Q1001	2SD601A	TRANSISTOR	1	
Q1002	2SD602A	TRANSISTOR	1	
Q1003	2SD1996-S	TRANSISTOR	1	
Q1004	2SB710A	TRANSISTOR	1	
Q1005, 06	2SD1996-S	TRANSISTOR	2	
Q1007	2SD602A-R	TRANSISTOR	1	
Q1009	2SD1996-S	TRANSISTOR	1	
Q1010	2SD601A	TRANSISTOR	1	
Q1201, 02	2SD1996-S	TRANSISTOR	2	
Q1501	PNB2301MBV	TRANSISTOR	1	
Q1502	PNB2301MAV	TRANSISTOR	1	
Q3003	2SB709A	TRANSISTOR	1	
Q4001	2SD1149	TRANSISTOR	1	
Q4002	2SD601A	TRANSISTOR	1	
Q4006	2SB710A-R	TRANSISTOR	1	
Q4007	2SD602A-R	TRANSISTOR	1	
Q4901	2SB709A	TRANSISTOR	1	
Q4903, 04	2SD601A	TRANSISTOR	2	
Q4905	2SD1328-S	TRANSISTOR	1	
Q7601	2SD601A	TRANSISTOR	1	
Q7604	2SD601A	TRANSISTOR	1	
Q7605	2SB709A	TRANSISTOR	1	
Q7606	2SD601A	TRANSISTOR	1	
Q7701	2SD601A	TRANSISTOR	1	
Q7702	2SB709A	TRANSISTOR	1	
Q7703	2SD601A	TRANSISTOR	1	
Q7709	2SB709A	TRANSISTOR	1	
Q7802	2SD601A	TRANSISTOR	1	

Ref.No.	Part No.	Part Name & Description	Pcs	Remarks
QR1001	MUN2112	TRANSISTOR-RESISTOR	1	
QR1002	MUN2211	TRANSISTOR-RESISTOR	1	
QR1003	MUN2212	TRANSISTOR-RESISTOR	1	
QR3006, 07	MUN2212	TRANSISTOR-RESISTOR	2	
QR4001	UN2217	TRANSISTOR-RESISTOR	1	
QR4002	MUN2113	TRANSISTOR-RESISTOR	1	
QR4004	MUN2212	TRANSISTOR-RESISTOR	1	
QR4006	MUN2111	TRANSISTOR-RESISTOR	1	
QR4502-05	UN2215	TRANSISTOR	4	
QR4506	MUN2113	TRANSISTOR-RESISTOR	1	
QR4903	MUN2212	TRANSISTOR-RESISTOR	1	
QR6002	MUN2211	TRANSISTOR-RESISTOR	1	
QR6003, 04	MUN2212	TRANSISTOR-RESISTOR	2	
QR6005	MUN2211	TRANSISTOR-RESISTOR	1	
QR6006	MUN2213	TRANSISTOR-RESISTOR	1	
QR6007	MUN2113	TRANSISTOR-RESISTOR	1	
R0705	ERJ3GEYJ362	M.RESISTOR CH 1/16W 3.6K	1	
R0707	ERJ3GEYJ393	M.RESISTOR CH 1/16W 39K	1	
R0708	ERJ3GEYJ103	M.RESISTOR CH 1/16W 10K	1	
R0711	ERJ3GEYJ181	M.RESISTOR CH 1/16W 180	1	
R0713	ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	1	
R0715	ERJ3GEYJ223	M.RESISTOR CH 1/16W 22K	1	
R0717	ERJ3GEYJ471	M.RESISTOR CH 1/16W 470	1	
R0719	ERJ3GEYJ472	M.RESISTOR CH 1/16W 4.7K	1	
R0725	ERJ6GEYJ101	M.RESISTOR CH 1/10W 100	1	
R0726	ERJ3GEYJ683	M.RESISTOR CH 1/16W 68K	1	
R0727	ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	1	
R0729	ERJ3GEYJ103	M.RESISTOR CH 1/16W 10K	1	
R0730	ERJ6GEYG103	M.RESISTOR CH 1/10W 10K	1	
R0740	ERJ3GEYG271	M.RESISTOR CH 1/16W 270	1	[SUPPLIED FROM MBV]
R0741	ERJ3GEYJ221	M.RESISTOR CH 1/16W 220	1	
R0742	ERJ8GEYJ151	M.RESISTOR CH 1/8W 150	1	
R0745	ERJ6GEYJ335	M.RESISTOR CH 1/10W 3.3M	1	
R1001, 02	ERJ6GMYJ333	M.RESISTOR CH 1/10W 33K	2	
R1003, 04	ERJ6GMYJ562	M.RESISTOR CH 1/10W 5.6K	2	
R1005	ERDS2TJ182	C.RESISTOR 1/4W 1.8K	1	
R1006	ERJ6GMYJ472	M.RESISTOR CH 1/10W 4.7K	1	
R1008	ERDS2TJ682	C.RESISTOR 1/4W 6.8K	1	
R1009, 10	ERJ6GMYJ103	M.RESISTOR CH 1/10W 10K	2	
R1011	ERJ6GMYG823	M.RESISTOR CH 1/10W 82K	1	
R1012	ERDS2TJ272	C.RESISTOR 1/4W 2.7K	1	
R1013	ERJ6GMYG153	M.RESISTOR CH 1/10W 15K	1	
R1014	ERJ6GMYG163	M.RESISTOR CH 1/10W 16K	1	
R1015	ERJ6GMYG123	M.RESISTOR CH 1/10W 12K	1	
R1016, 17	ERJ6GMYJ563	M.RESISTOR CH 1/10W 56K	2	
R1018, 19	ERJ6GMYJ683	M.RESISTOR CH 1/10W 68K	2	
R1022	ERJ6GMYJ103	M.RESISTOR CH 1/10W 10K	1	
R1023	ERJ6GMYJ123	M.RESISTOR CH 1/10W 12K	1	
R1024	ERJ6GMYJ103	M.RESISTOR CH 1/10W 10K	1	
R1026	ERJ6GMYJ152	M.RESISTOR CH 1/10W 1.5K	1	
R1027	ERDS2TJ123	C.RESISTOR 1/4W 12K	1	
R1028	ERJ6GMYJ102	M.RESISTOR CH 1/10W 1K	1	
R1029	ERJ6GMYG562	M.RESISTOR CH 1/10W 5.6K	1	
R1030	ERJ6GMYG622	M.RESISTOR CH 1/10W 6.2K	1	
R1201, 02	ERJ6GMYG272	M.RESISTOR CH 1/10W 2.7K	2	
R1203	ERJ6GMYJ623	M.RESISTOR CH 1/10W 6.2K	1	
R1204	ERDS2TJ102	C.RESISTOR 1/4W 1K	1	
R1501	ERJ6GMYJ101	M.RESISTOR CH 1/10W 100	1	
R1502	ERJ6GMYJ273	M.RESISTOR CH 1/10W 27K	1	
R1503	ERDS2TJ181	C.RESISTOR 1/4W 180	1	
R1504	ERJ6GMYJ273	M.RESISTOR CH 1/10W 27K	1	
R1505	ERDS2TJ121	C.RESISTOR 1/4W 120	1	
R2501	ERDS2TJ331	C.RESISTOR 1/4W 330	1	
R2502	ERJ6GMYG433	M.RESISTOR CH 1/10W 43K	1	
R2503	ERDS2TJ330	C.RESISTOR 1/4W 33	1	
R2504	ERJ6GMZ0R00	M.RESISTOR CH 1/10W 0	1	
R2505	ERJ6GMYJ103	M.RESISTOR CH 1/10W 10K	1	
R2506	ERJ6GMYJ102	M.RESISTOR CH 1/10W 1K	1	
R2507	ERJ6GMYJ392	M.RESISTOR CH 1/10W 3.9K	1	
R2508	ERDS2TJ330	C.RESISTOR 1/4W 33	1	
R2509	ERJ6GMYJ102	M.RESISTOR CH 1/10W 1K	1	
R2510	ERJ6GMYJ105	M.RESISTOR CH 1/10W 1M	1	
R2513	ERJ6GMYJ274	M.RESISTOR CH 1/10W 270	1	
R2514	ERJ6GMYJ103	M.RESISTOR CH 1/10W 10K	1	

Ref.No.	Part No.	Part Name & Description	Pcs	Remarks
R2517	ERDS1TJ1R2	C.RESISTOR 1/2W 1.2	1	
R2518	ERDS1TJ1R5	C.RESISTOR 1/2W 1.5	1	
R2519	ERDS2TJ330	C.RESISTOR 1/4W 33	1	
R3001	ERJ6GMYJ183	M.RESISTOR CH 1/10W 18K	1	
R3002	ERJ6GMYG301	M.RESISTOR CH 1/10W 300	1	
R3004	ERJ6GMYJ472	M.RESISTOR CH 1/10W 4.7K	1	
R3005	ERJ6GMZ0R00	M.RESISTOR CH 1/10W 0	1	
R3007	ERJ6GMZ0R00	M.RESISTOR CH 1/10W 0	1	
R3008	ERJ6GMYJ152	M.RESISTOR CH 1/10W 1.5K	1	
R3009	ERJ6GMYJ101	M.RESISTOR CH 1/10W 100	1	
R3010	ERJ6GMYJ473	M.RESISTOR CH 1/10W 47K	1	
R3011, 12	ERJ6GMYJ101	M.RESISTOR CH 1/10W 100	2	
R3020	ERJ6GMZ0R00	M.RESISTOR CH 1/10W 0	1	
R3021	ERJ6GMYJ684	M.RESISTOR CH 1/10W 680K	1	
R3022	ERJ6GMYJ224	M.RESISTOR CH 1/10W 220K	1	
R3023	ERJ6GMYJ332	M.RESISTOR CH 1/10W 3.3K	1	
R3024	ERJ6GMYG271	M.RESISTOR CH 1/10W 270	1	
R3025	ERJ6GMYG102	M.RESISTOR CH 1/10W 1K	1	
R3026	ERJ6GMYG152	M.RESISTOR CH 1/10W 1.5K	1	
R3027	ERJ6GMYJ562	M.RESISTOR CH 1/10W 5.6K	1	
R3028	ERJ6GMYG152	M.RESISTOR CH 1/10W 1.5K	1	
R3029	ERJ6GMYG331	M.RESISTOR CH 1/10W 330	1	
R3030	ERJ6GMYJ123	M.RESISTOR CH 1/10W 12K	1	
R3031	ERJ6GMYJ225	M.RESISTOR CH 1/10W 2.2M	1	
R3032	ERJ6GMYG391	M.RESISTOR CH 1/10W 390	1	
R3033	ERJ6GMYG471	M.RESISTOR CH 1/10W 470	1	
R3034	ERJ6GMYG561	M.RESISTOR CH 1/10W 560	1	
R3035	ERJ6GMYG271	M.RESISTOR CH 1/10W 270	1	
R3036	ERJ6GMYJ272	M.RESISTOR CH 1/10W 2.7K	1	
R3040	ERJ6GMZ0R00	M.RESISTOR CH 1/10W 0	1	
R3505	ERJ6GMYJ101	M.RESISTOR CH 1/10W 100	1	
R4001	ERJ6GMYG334	M.RESISTOR CH 1/10W 330K	1	
R4002	ERJ6GMYG103	M.RESISTOR CH 1/10W 10K	1	
R4003	ERJ6GMYJ753	M.RESISTOR CH 1/10W 75K	1	
R4004	ERJ6GMYJ153	M.RESISTOR CH 1/10W 15K	1	
R4005	ERJ6GMYG241	M.RESISTOR CH 1/10W 240	1	
R4006	ERJ6GMYJ223	M.RESISTOR CH 1/10W 22K	1	
R4007	ERJ6GMYJ472	M.RESISTOR CH 1/10W 4.7K	1	
R4008	ERJ6GMYJ222	M.RESISTOR CH 1/10W 2.2K	1	
R4009	ERJ6GMYJ181	M.RESISTOR CH 1/10W 180	1	
R4010	ERJ6GMYJ391	M.RESISTOR CH 1/10W 390	1	
R4011	ERJ6GMYJ392	M.RESISTOR CH 1/10W 3.9K	1	
R4012	ERJ6GMZ0R00	M.RESISTOR CH 1/10W 0	1	
R4014	ERJ6GMYK225	M.RESISTOR CH 1/10W 2.2M	1	
R4015	ERJ6GMYJ272	M.RESISTOR CH 1/10W 2.7K	1	
R4016	ERJ6GMYJ182	M.RESISTOR CH 1/10W 1.8K	1	
R4019	ERJ6GMYJ101	M.RESISTOR CH 1/10W 100	1	
R4036	ERJ6GMYJ682	M.RESISTOR CH 1/10W 6.8K	1	
R4037	ERJ6GMYJ222	M.RESISTOR CH 1/10W 2.2K	1	
R4038, 39	ERJ6GMYJ154	M.RESISTOR CH 1/10W 150K	2	
R4049	ERJ6GMYJ473	M.RESISTOR CH 1/10W 47K	1	
R4060	ERJ6GMYJ822	M.RESISTOR CH 1/10W 8.2K	1	
R4061	ERJ6GMYJ332	M.RESISTOR CH 1/10W 3.3K	1	
R4062	ERJ6GMYJ272	M.RESISTOR CH 1/10W 2.7K	1	
R4063	ERJ6GMYJ332	M.RESISTOR CH 1/10W 3.3K	1	
R4067	ERJ6GMYJ682	M.RESISTOR CH 1/10W 6.8K	1	
R4068	ERJ6GMYJ222	M.RESISTOR CH 1/10W 2.2K	1	
R4069, 70	ERJ6GMYJ154	M.RESISTOR CH 1/10W 150K	2	
R4071	ERJ6GMYJ103	M.RESISTOR CH 1/10W 10K	1	
R4072	ERJ6GMYJ224	M.RESISTOR CH 1/10W 220K	1	
R4073	ERJ6GMYJ472	M.RESISTOR CH 1/10W 4.7K	1	
R4503-06	ERJ6GMYJ753	M.RESISTOR CH 1/10W 75K	4	
R4509	ERJ6GMYK335	M.RESISTOR CH 1/10W 3.3M	1	
R4510	ERJ6GMYJ221	M.RESISTOR CH 1/10W 220	1	
R4512	ERJ6GMYJ221	M.RESISTOR CH 1/10W 220	1	
R4514	ERJ6GMYJ221	M.RESISTOR CH 1/10W 220	1	
R4516, 17	ERJ6GMYJ104	M.RESISTOR CH 1/10W 100K	2	
R4518, 19	ERJ6GMYJ221	M.RESISTOR CH 1/10W 220	2	
R4520	ERJ6GMYJ223	M.RESISTOR CH 1/10W 22K	1	
R4521	ERJ6GMYJ393	M.RESISTOR CH 1/10W 39K	1	
R4522	ERJ6GMYJ332	M.RESISTOR CH 1/10W 3.3K	1	
R4523	ERJ6RBD393	M.RESISTOR CH 1/10W 39K	1	[SUPPLIED FROM MBV]
R4524	ERJ6GMYJ332	M.RESISTOR CH 1/10W 3.3K	1	
R4525	ERJ6GMYJ393	M.RESISTOR CH 1/10W 39K	1	
R4526	ERJ6GMYJ221	M.RESISTOR CH 1/10W 220	1	

Ref.No.	Part No.	Part Name & Description	Pcs	Remarks
R4527	ERJ6GMYJ103	M.RESISTOR CH 1/10W 10K	1	
R4528	ERJ6GMYJ102	M.RESISTOR CH 1/10W 1K	1	
R4529, 30	ERJ6GMYJ391	M.RESISTOR CH 1/10W 390	2	
R4539	ERJ6GMYJ223	M.RESISTOR CH 1/10W 22K	1	
R4901, 02	ERJ6GMYJ331	M.RESISTOR CH 1/10W 330	2	
R4905	ERDS2TJ471	C.RESISTOR 1/4W 470	1	
R4907, 08	ERJ6GMYJ221	M.RESISTOR CH 1/10W 220	2	
R4911	ERJ6GMYJ221	M.RESISTOR CH 1/10W 220	1	
R4912	ERJ6GMYJ472	M.RESISTOR CH 1/10W 4.7K	1	
R4913	ERJ6GMYJ153	M.RESISTOR CH 1/10W 15K	1	
R4915	ERJ6GMYJ223	M.RESISTOR CH 1/10W 22K	1	
R4916	ERJ6GMYJ471	M.RESISTOR CH 1/10W 470	1	
R4921	ERJ6GMYJ331	M.RESISTOR CH 1/10W 330	1	
R4923	ERJ6GMYJ331	M.RESISTOR CH 1/10W 330	1	
R4924, 25	ERJ6GMYJ750	M.RESISTOR CH 1/10W 75	2	
R4926, 27	ERJ6GMYJ473	M.RESISTOR CH 1/10W 47K	2	
R4928, 29	ERJ6GMYJ750	M.RESISTOR CH 1/10W 75	2	
R4931	ERJ6GMYJ103	M.RESISTOR CH 1/10W 10K	1	
R4933	ERJ6GMYJ911	M.RESISTOR CH 1/10W 910	1	
R4934	ERJ6GMYJ102	M.RESISTOR CH 1/10W 1K	1	
R6001	ERJ6GMYJ562	M.RESISTOR CH 1/10W 5.6K	1	
R6002, 03	ERJ6GMYJ102	M.RESISTOR CH 1/10W 1K	2	
R6005	ERJ6GMYJ103	M.RESISTOR CH 1/10W 10K	1	
R6006	ERJ6GMYJ102	M.RESISTOR CH 1/10W 1K	1	
R6007	ERJ6GMYJ273	M.RESISTOR CH 1/10W 27K	1	
R6008	ERJ6GMYJ224	M.RESISTOR CH 1/10W 220K	1	
R6010	ERJ6GMYJ153	M.RESISTOR CH 1/10W 15K	1	
R6011	ERJ6GMYJ103	M.RESISTOR CH 1/10W 10K	1	
R6012, 13	ERJ6GMYJ472	M.RESISTOR CH 1/10W 4.7K	2	
R6014	ERJ6GMZ0R00	M.RESISTOR CH 1/10W 0	1	
R6015	ERJ6GMYJ103	M.RESISTOR CH 1/10W 10K	1	
R6016	ERJ6GMYJ153	M.RESISTOR CH 1/10W 15K	1	
R6017	ERJ6GMYJ682	M.RESISTOR CH 1/10W 6.8K	1	
R6018	ERDS2TJ221	C.RESISTOR 1/4W 220	1	
R6020	ERJ6GMYJ102	M.RESISTOR CH 1/10W 1K	1	
R6022	ERJ6GMYJ102	M.RESISTOR CH 1/10W 1K	1	
R6023-30	ERJ6GMYJ221	M.RESISTOR CH 1/10W 220	8	
R6031	ERJ6GMYJ273	M.RESISTOR CH 1/10W 27K	1	
R6032	ERJ6GMYJ393	M.RESISTOR CH 1/10W 39K	1	
R6033	ERJ6GMYJ273	M.RESISTOR CH 1/10W 27K	1	
R6036	ERJ6GMYJ101	M.RESISTOR CH 1/10W 100	1	
R6038	ERJ6GMYJ433	M.RESISTOR CH 1/10W 43K	1	
R6039	ERJ6GMYJ393	M.RESISTOR CH 1/10W 39K	1	
R7302	ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	1	
R7305, 06	ERJ6GEYJ101	M.RESISTOR CH 1/10W 100	2	
R7316	ERJ3GEYJ103	M.RESISTOR CH 1/16W 10K	1	
R7324	ERJ3GEYJ221	M.RESISTOR CH 1/16W 220	1	
R7325	ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	1	
R7327	ERJ3GEYJ822	M.RESISTOR CH 1/16W 8.2K	1	
R7328, 29	ERJ3GEYJ221	M.RESISTOR CH 1/16W 220	2	
R7501	ERDS2TJ150	C.RESISTOR 1/4W 15	1	
R7502	ERJ6GMYJ101	M.RESISTOR CH 1/10W 100	1	
R7503, 04	ERJ6GMYJ202	M.RESISTOR CH 1/10W 2K	2	
R7505	ERJ6GMZ0R00	M.RESISTOR CH 1/10W 0	1	
R7506-08	ERJ6GMYJ332	M.RESISTOR CH 1/10W 3.3K	3	
R7509	ERJ6GMYJ822	M.RESISTOR CH 1/10W 8.2K	1	
R7510	ERJ6GMYJ562	M.RESISTOR CH 1/10W 5.6K	1	
R7511	ERJ6GMYJ432	M.RESISTOR CH 1/10W 4.3K	1	
R7512, 13	ERJ6GMYJ103	M.RESISTOR CH 1/10W 10K	2	
R7514	ERJ6GMYJ822	M.RESISTOR CH 1/10W 8.2K	1	
R7515	ERJ6GMYJ562	M.RESISTOR CH 1/10W 5.6K	1	
R7516	ERJ6GMYJ432	M.RESISTOR CH 1/10W 4.3K	1	
R7517	ERJ6GMYJ103	M.RESISTOR CH 1/10W 10K	1	
R7520, 21	ERJ6GMYJ223	M.RESISTOR CH 1/10W 22K	2	
R7522	ERJ6GMYJ181	M.RESISTOR CH 1/10W 180	1	
R7523-26	ERJ6GMYJ303	M.RESISTOR CH 1/10W 30K	4	
R7538	ERJ6GMYJ432	M.RESISTOR CH 1/10W 4.3K	1	
R7549	ERDS2TJ150	C.RESISTOR 1/4W 15	1	
R7601, 02	ERJ6GMYJ101	M.RESISTOR CH 1/10W 100	2	
R7603	ERJ6GMYJ102	M.RESISTOR CH 1/10W 1K	1	
R7606, 07	ERJ6GMYJ101	M.RESISTOR CH 1/10W 100	2	
R7608, 09	ERDS2TJ331	C.RESISTOR 1/4W 330	2	
R7610	ERJ6GMYJ151	M.RESISTOR CH 1/10W 150	1	
R7612	ERJ6GMZ0R00	M.RESISTOR CH 1/10W 0	1	
R7613	ERJ6GMYJ151	M.RESISTOR CH 1/10W 150	1	

Ref. No.	Part No.	Part Name & Description	Pcs	Remarks
R7614	ERJ6GMYJ561	M. RESISTOR CH 1/10W 560	1	
R7615	ERJ6GMYJ103	M. RESISTOR CH 1/10W 10K	1	
R7620	ERJ6GMYJ104	M. RESISTOR CH 1/10W 100K	1	
R7621	ERJ6GMYJ182	M. RESISTOR CH 1/10W 1. 8K	1	
R7622, 23	ERJ6GMYJ154	M. RESISTOR CH 1/10W 150K	2	
R7704	ERJ6GMYJ472	M. RESISTOR CH 1/10W 4. 7K	1	
R7705	ERJ6GMYJ473	M. RESISTOR CH 1/10W 47K	1	
R7707	ERJ6GMYJ471	M. RESISTOR CH 1/10W 470	1	
R7708-10	ERJ6GMYJ511	M. RESISTOR CH 1/10W 510	3	
R7711	ERJ6GMYJ104	M. RESISTOR CH 1/10W 100K	1	
R7712	ERJ6GMYJ102	M. RESISTOR CH 1/10W 1K	1	
R7713	ERJ6GMYJ104	M. RESISTOR CH 1/10W 100K	1	
R7714	ERJ6GMYG153	M. RESISTOR CH 1/10W 15K	1	
R7715	ERJ6GMYG152	M. RESISTOR CH 1/10W 1. 5K	1	
R7716	ERJ6GMYG562	M. RESISTOR CH 1/10W 5. 6K	1	
R7729	ERJ6GMYJ102	M. RESISTOR CH 1/10W 1K	1	
R7730	ERJ6GMYJ332	M. RESISTOR CH 1/10W 3. 3K	1	
R7740	ERJ6GMYJ472	M. RESISTOR CH 1/10W 4. 7K	1	
R7741-44	ERJ6GMYJ101	M. RESISTOR CH 1/10W 100	4	
R7746	ERJ6GMYJ101	M. RESISTOR CH 1/10W 100	1	
R7751, 52	ERJ6GMYJ101	M. RESISTOR CH 1/10W 100	2	
R7753	ERJ6GMYJ272	M. RESISTOR CH 1/10W 2. 7K	1	
R7754-57	ERJ6GMYJ101	M. RESISTOR CH 1/10W 100	4	
R7759	ERJ6GMYJ222	M. RESISTOR CH 1/10W 2. 2K	1	
R7760	ERJ6GMZ0R00	M. RESISTOR CH 1/10W 0	1	
R7761	ERJ6GMYJ472	M. RESISTOR CH 1/10W 4. 7K	1	
R7765-67	ERJ6GMYJ101	M. RESISTOR CH 1/10W 100	3	
R7768	ERJ6GMYJ472	M. RESISTOR CH 1/10W 4. 7K	1	
R7769	ERJ6GMYJ101	M. RESISTOR CH 1/10W 100	1	
R7770	ERJ6GMYJ472	M. RESISTOR CH 1/10W 4. 7K	1	
R7771-78	ERJ6GMYJ101	M. RESISTOR CH 1/10W 100	8	
R7784, 85	ERJ6GMYJ472	M. RESISTOR CH 1/10W 4. 7K	2	
R7792-99	ERJ6GMYJ101	M. RESISTOR CH 1/10W 100	8	
R7802, 03	ERJ6GMZ0R00	M. RESISTOR CH 1/10W 0	2	
R7804, 05	ERJ6GMYJ102	M. RESISTOR CH 1/10W 1K	2	
R7807	ERJ6GMYJ102	M. RESISTOR CH 1/10W 1K	1	
R7808	ERJ6GMYJ473	M. RESISTOR CH 1/10W 47K	1	
R7809	ERJ6GMYJ472	M. RESISTOR CH 1/10W 4. 7K	1	
S1501	VSS0520-3	MODE SELECT SWITCH	1	[SUPPLIED. FROM MBV]
S7501	VES0834	S-TAB SWITCH	1	
S7502-06	EVQ11L07B	SWITCH	5	
T0701	EQV5EC082P	TRANSFORMER	1	[SUPPLIED FROM MBV]
T4001	EQQ7QF024P	TRANSFORMER	1	
⚠ TU7601	ENG47307G1	TUNER	1	[SUPPLIED FROM MBV]
VR0701	EVNCBAA00B14	V. RESISTOR	1	
X0701	VLF1416	FILTER	1	[SUPPLIED FROM MBV]
X0704	VLF1493	FILTER	1	[SUPPLIED FROM MBV]
X3001	VSX0162	CRYSTAL OSCILLATOR	1	
X6001	VSX0830	CRYSTAL OSCILLATOR	1	
X6002	VSX0660	CRYSTAL OSCILLATOR	1	
X7302	VSX0953	CRYSTAL OSCILLATOR	1	
X7701	VSX1043	CRYSTAL OSCILLATOR	1	
		MISCELLANEOUS		
	VSC4999	SHIELD CASE (MIDDLE)	1	[SUPPLIED FROM MBV]
	VSC4998	HA ANGLE	1	[SUPPLIED FROM MBV]
	VXQ0648	FIP HOLDER	1	
	VSC4752	SHIELD CASE (MAIN)	1	FOR NICAM DECODER C. B. A.
	VMP5897	CONNECTING ANGLE	1	FOR TV DEMODULATOR C. B. A.
■	VEP06D57A	MAIN C. B. A.		[SUPPLIED FROM MBV]
				(RTL) NV-FJ610EGYS/EGYK
				NV-FJ606EGYK
C0701	ECUM1C105ZFN	C. CAPACITOR CH 16V 1U	1	
C0702	ECUX1H102KBV	C. CAPACITOR CH 50V 1000P	1	
C0703	ECUM1A105KBN	C. CAPACITOR CH 10V 1U	1	
C0704	ECUM1E333KBN	C. CAPACITOR CH 25V 0. 033U	1	
C0706	ECEA1HKA010	E. CAPACITOR 50V 1U	1	

Ref. No.	Part No.	Part Name & Description	Pcs	Remarks
C0707	ECEA1HKA2R2	E. CAPACITOR 50V 2. 2U	1	
C0708	ECEA1HKAR47	E. CAPACITOR 50V 0. 47U	1	
C0710	ECUX1H103ZFV	C. CAPACITOR CH 50V 0. 01U	1	
C0711	ECEA1CKA220	E. CAPACITOR 16V 22U	1	
C0712	ECUX1C104ZFV	C. CAPACITOR CH 16V 0. 1U	1	
C0713	EEUFA1A391	E. CAPACITOR 10V 390U	1	[SUPPLIED FROM MBV]
C0714	ECUM1C105ZFN	C. CAPACITOR CH 16V 1U	1	
C0715	ECUX1H030CCV	C. CAPACITOR CH 50V 3P	1	
C0716	ECUX1H123KBV	C. CAPACITOR CH 50V 0. 012U	1	
C0717	ECUM1H330GUV	C. CAPACITOR CH 50V 33P	1	
C0719	ECUX1E104ZFV	C. CAPACITOR CH 25V 0. 1U	1	
C0721	ECUX1H181JCV	C. CAPACITOR CH 50V 180P	1	
C0724	ECUX1H221KBV	C. CAPACITOR CH 50V 220P	1	
C1001	ECEA1AKG220	E. CAPACITOR 10V 22U	1	[SUPPLIED FROM MBV]
C1002	ECUM1H103ZFN	C. CAPACITOR CH 50V 0. 01U	1	
C1003	ECEA1CGE470	E. CAPACITOR 16V 47U	1	
C1004	ECUM1H103ZFN	C. CAPACITOR CH 50V 0. 01U	1	
C1005	ECEA1AKA470	E. CAPACITOR 10V 47U	1	
C1006, 07	ECUM1H103ZFN	C. CAPACITOR CH 50V 0. 01U	2	
C1008	ECA1CAK470X	E. CAPACITOR 16V 47U	1	
C1009	ECEA0JKA470	E. CAPACITOR 6. 3V 47U	1	
C1010	ECEA1CGE470	E. CAPACITOR 16V 47U	1	
C1011, 12	ECEA1CKA100	E. CAPACITOR 16V 10U	2	
C1015	ECUM1H102KBN	C. CAPACITOR CH 50V 1000P	1	
C1016	ECA1CAK100X	E. CAPACITOR 16V 10U	1	
C1017	ECEA1HKA4R7	E. CAPACITOR 50V 4. 7U	1	
C1201	ECEA0JKA101	E. CAPACITOR 6. 3V 100U	1	
C1202	ECUM1H103ZFN	C. CAPACITOR CH 50V 0. 01U	1	
C1203	ECEA1AKA220	E. CAPACITOR 10V 22U	1	
C1204	ECUM1H103ZFN	C. CAPACITOR CH 50V 0. 01U	1	
C1205	ECEA0JKA470	E. CAPACITOR 6. 3V 47U	1	
C1206, 07	ECUM1E104KBN	C. CAPACITOR CH 25V 0. 1U	2	
C1208	ECUM1H103ZFN	C. CAPACITOR CH 50V 0. 01U	1	
C1501	ECUM1H221JCN	C. CAPACITOR CH 50V 220P	1	
C2501	ECUM1C474ZFN	C. CAPACITOR CH 16V 0. 47U	1	
C2502	ECEA1VKN4R7	E. CAPACITOR 35V 4. 7U	1	
C2503	ECUM1H563ZFN	C. CAPACITOR CH 50V 0. 056U	1	
C2504	ECEA1EKA470	E. CAPACITOR 25V 47U	1	
C2505	ECUM1H330JCN	C. CAPACITOR CH 50V 33P	1	
C2506	ECEA0JKN220	E. CAPACITOR 6. 3V 22U	1	
C2507	ECUM1H104ZFN	C. CAPACITOR CH 50V 0. 1U	1	
C2508	ECEA1EKA4R7	E. CAPACITOR 25V 4. 7U	1	
C2509, 10	ECUM1H563ZFN	C. CAPACITOR CH 50V 0. 056U	2	
C2511	ECEA1VKN4R7	E. CAPACITOR 35V 4. 7U	1	
C2512	ECUM1H392KBN	C. CAPACITOR CH 50V 3900P	1	
C2516	ECEA0JKA221	E. CAPACITOR 6. 3V 220U	1	
C2518	ECUM1H473ZFN	C. CAPACITOR CH 50V 0. 047U	1	
C2521	ECEA1EKA470	E. CAPACITOR 25V 47U	1	
C2522	ECUM1E683KBN	C. CAPACITOR CH 25V 0. 068U	1	
C2523-25	ECUM1C154KBN	C. CAPACITOR CH 16V 0. 15U	3	
C2526	ECEA1VKN4R7	E. CAPACITOR 35V 4. 7U	1	
C2535, 36	ECUM1H104ZFN	C. CAPACITOR CH 50V 0. 1U	2	
C3002, 03	ECUM1H102KBN	C. CAPACITOR CH 50V 1000P	2	
C3004	ECEA1HKA010	E. CAPACITOR 50V 1U	1	
C3005	ECUM1H680JCN	C. CAPACITOR CH 50V 68P	1	
C3006	ECUM1H060DCN	C. CAPACITOR CH 50V 6P	1	
C3007	ECUM1E104KBN	C. CAPACITOR CH 25V 0. 1U	1	
C3008	ECUM1H103ZFN	C. CAPACITOR CH 50V 0. 01U	1	
C3011	ECEA0JKA221	E. CAPACITOR 6. 3V 220U	1	
C3012, 13	ECUM1H104ZFN	C. CAPACITOR CH 50V 0. 1U	2	
C3014	ECUM1H103ZFN	C. CAPACITOR CH 50V 0. 01U	1	
C3015	ECEA1HKA010	E. CAPACITOR 50V 1U	1	
C3016	ECUM1H333KBN	C. CAPACITOR CH 50V 0. 033U	1	
C3017	ECUM1H104ZFN	C. CAPACITOR CH 50V 0. 1U	1	
C3018	ECEA0JKA101	E. CAPACITOR 6. 3V 100U	1	
C3019	ECUM1E104KBN	C. CAPACITOR CH 25V 0. 1U	1	
C3020	ECUM1H222KBN	C. CAPACITOR CH 50V 2200P	1	
C3021	ERJ6GMZ0R00	M. RESISTOR CH 1/10W 0	1	
C3024	ECEA0JKA470	E. CAPACITOR 6. 3V 47U	1	
C3025	ECEA0JKA101	E. CAPACITOR 6. 3V 100U	1	
C3026	ECUM1H104ZFN	C. CAPACITOR CH 50V 0. 1U	1	
C3029	ECUM1H103ZFN	C. CAPACITOR CH 50V 0. 01U	1	
C3030	ECUM1H222KBN	C. CAPACITOR CH 50V 2200P	1	
C3031	ECEA1HKAR47	E. CAPACITOR 50V 0. 47U	1	
C3033	ECEA1EKN4R7	E. CAPACITOR 25V 4. 7U	1	

Ref.No.	Part No.	Part Name & Description	Pcs	Remarks
C3034	ECEA1EKA4R7	E.CAPACITOR 25V 4.7U	1	
C3035	ECUM1H104ZFN	C.CAPACITOR CH 50V 0.1U	1	
C3036	ECEA0JKA221	E.CAPACITOR 6.3V 220U	1	
C3037	ECUM1H104ZFN	C.CAPACITOR CH 50V 0.1U	1	
C3038	ECEA0JKA101	E.CAPACITOR 6.3V 100U	1	
C3039	ECEA0JKA220	E.CAPACITOR 6.3V 22U	1	
C3040	ECUM1H223KBN	C.CAPACITOR CH 50V 0.022U	1	
C3041	ECEA1CKA100	E.CAPACITOR 16V 10U	1	
C3042	ECUM1H560JCN	C.CAPACITOR CH 50V 56P	1	
C3043	ECUM1H104ZFN	C.CAPACITOR CH 50V 0.1U	1	
C3044	ECUM1H821JCN	C.CAPACITOR CH 50V 820P	1	
C3045	ECUM1H221JCN	C.CAPACITOR CH 50V 220P	1	
C3046	ECUM1H220JCN	C.CAPACITOR CH 50V 22P	1	
C3047	ECEA0JKA220	E.CAPACITOR 6.3V 22U	1	
C3048	ECUM1H560JCN	C.CAPACITOR CH 50V 56P	1	
C3049	ECUM1H681JCN	C.CAPACITOR CH 50V 680P	1	
C3050	ECUM1H680JCN	C.CAPACITOR CH 50V 68P	1	
C3051	ECUM1H220JCN	C.CAPACITOR CH 50V 22P	1	
C3052, 53	ECUM1H104ZFN	C.CAPACITOR CH 50V 0.1U	2	
C3054, 55	ECUM1E104KBN	C.CAPACITOR CH 25V 0.1U	2	
C3502	ECUM1H103KBN	C.CAPACITOR CH 50V 0.01U	1	
C3504	ECUM1H103KBN	C.CAPACITOR CH 50V 0.01U	1	
C3505	ECEA0JKS470	E.CAPACITOR 6.3V 47U	1	
C3506	ECUM1H103KBN	C.CAPACITOR CH 50V 0.01U	1	
C3507-10	ECUM1E104KBN	C.CAPACITOR CH 25V 0.1U	4	
C4001	ECEA1HKN010	E.CAPACITOR 50V 1U	1	
C4002	ECQB1H822JF	P.CAPACITOR 50V 8200P	1	
C4003	ECEA1HKA010	E.CAPACITOR 50V 1U	1	
C4004	ECEA1EKA4R7	E.CAPACITOR 25V 4.7U	1	
C4005	ECUM1H272KBN	C.CAPACITOR CH 50V 2700P	1	
C4006	ECEA0JKA220	E.CAPACITOR 6.3V 22U	1	
C4007	ECUM1H122JCN	C.CAPACITOR CH 50V 1200P	1	[SUPPLIED FROM MBV]
C4010, 11	ECUM1H153KBN	C.CAPACITOR CH 50V 0.015U	2	
C4012	ECEA1HKA010	E.CAPACITOR 50V 1U	1	
C4013	ECEA0JKA470	E.CAPACITOR 6.3V 47U	1	
C4014	ECEA1HKA0R1	E.CAPACITOR 50V 0.1U	1	
C4015	ECEA0JKA220	E.CAPACITOR 6.3V 22U	1	
C4016	ECEA1HKA0R1	E.CAPACITOR 50V 0.1U	1	
C4018	ECUM1H104ZFN	C.CAPACITOR CH 50V 0.1U	1	
C4019	ECEA0JKA470	E.CAPACITOR 6.3V 47U	1	
C4045	ECUM1H103KBN	C.CAPACITOR CH 50V 0.01U	1	
C4046-48	ECA1CAK100X	E.CAPACITOR 16V 10U	3	
C4068	ECQB1H223JF	P.CAPACITOR 50V 0.022U	1	
C4070	ECUM1H221JCN	C.CAPACITOR CH 50V 220P	1	
C4072	ECEA0JKA221	E.CAPACITOR 6.3V 220U	1	
C4073	ECUM1H223KBN	C.CAPACITOR CH 50V 0.022U	1	
C4074	ECUM1H152JCN	C.CAPACITOR CH 50V 1500P	1	
C4075	ECEA1AKA220	E.CAPACITOR 10V 22U	1	
C4501, 02	ECEA1HKNR47	E.CAPACITOR 50V 0.47U	2	
C4505-08	ECA1HAKR22X	E.CAPACITOR 50V 0.22U	4	[SUPPLIED FROM MBV]
C4511, 12	ECEA1CKA100	E.CAPACITOR 16V 10U	2	
C4513-16	ECA1CAK100X	E.CAPACITOR 16V 10U	4	
C4517	ECEA1CKA100	E.CAPACITOR 16V 10U	1	
C4518	ECEA1HKAR22	E.CAPACITOR 50V 0.22U	1	
C4519	ECA1CAK100X	E.CAPACITOR 16V 10U	1	
C4520	ECQB1H562JF	P.CAPACITOR 50V 5600P	1	
C4521	ECA1CAK470X	E.CAPACITOR 16V 47U	1	
C4522	ECA1CAK100X	E.CAPACITOR 16V 10U	1	
C4523	ECA1HAK2R2X	E.CAPACITOR 50V 2.2U	1	[SUPPLIED FROM MBV]
C4524	ECA1CAK100X	E.CAPACITOR 16V 10U	1	
C4525	ECA1CAK470X	E.CAPACITOR 16V 47U	1	
C4526	ECQB1H562JF	P.CAPACITOR 50V 5600P	1	
C4527	ECA1CAK100X	E.CAPACITOR 16V 10U	1	
C4528	ECUM1H104ZFN	C.CAPACITOR CH 50V 0.1U	1	
C4529	ECEA1CKS470	E.CAPACITOR 16V 47U	1	
C4530	ECUM1E104KBN	C.CAPACITOR CH 25V 0.1U	1	
C4531	ECUM1H103KBN	C.CAPACITOR CH 50V 0.01U	1	
C4532	ECUM1H561JCN	C.CAPACITOR CH 50V 560P	1	
C4533	ECUM1H104ZFN	C.CAPACITOR CH 50V 0.1U	1	
C4534	ECEA0JKS331	E.CAPACITOR 6.3V 330U	1	
C4535	ECUM1H471JCN	C.CAPACITOR CH 50V 470P	1	
C4540	ECUM1H102KBN	C.CAPACITOR CH 50V 1000P	1	
C4901, 02	ECUM1H470JCN	C.CAPACITOR CH 50V 47P	2	
C4903-09	ECUM1H471KBN	C.CAPACITOR CH 50V 470P	7	
C4912, 13	ECUM1H470JCN	C.CAPACITOR CH 50V 47P	2	

Ref.No.	Part No.	Part Name & Description	Pcs	Remarks
C4914	ECUM1H471KBN	C.CAPACITOR CH 50V 470P	1	
C4917	ECUM1E104KBN	C.CAPACITOR CH 25V 0.1U	1	
C4921	ECUM1E104KBN	C.CAPACITOR CH 25V 0.1U	1	
C4922	ECEA1CKA470	E.CAPACITOR 16V 47U	1	
C4923	ECUM1E104KBN	C.CAPACITOR CH 25V 0.1U	1	
C4925	ECUM1H104ZFN	C.CAPACITOR CH 50V 0.1U	1	
C4926	ECEA1CKA470	E.CAPACITOR 16V 47U	1	
C4927	ECUM1H104ZFN	C.CAPACITOR CH 50V 0.1U	1	
C4928	ECEA0JKA331	E.CAPACITOR 6.3V 330U	1	
C4929	ECUM1H104ZFN	C.CAPACITOR CH 50V 0.1U	1	
C4932	ECUM1H104ZFN	C.CAPACITOR CH 50V 0.1U	1	
C4933	ECEA1CKA470	E.CAPACITOR 16V 47U	1	
C4935	ECUM1H222KBN	C.CAPACITOR CH 50V 2200P	1	
C4938	ECUM1H222KBN	C.CAPACITOR CH 50V 2200P	1	
C4939	ECUM1H104ZFN	C.CAPACITOR CH 50V 0.1U	1	
C4940	ECEA0JKA331	E.CAPACITOR 6.3V 330U	1	
C4941	ECUM1E104KBN	C.CAPACITOR CH 25V 0.1U	1	
C6001	ECEA0JKA470	E.CAPACITOR 6.3V 47U	1	
C6002	ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	
C6003	ECUM1H200JCN	C.CAPACITOR CH 50V 20P	1	
C6004	ECUM1H120JCN	C.CAPACITOR CH 50V 12P	1	
C6005	ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	
C6006	ECUM1H471JCN	C.CAPACITOR CH 50V 470P	1	
C6007, 08	ECUM1H121JCN	C.CAPACITOR CH 50V 120P	2	
C6009	ECUM1H681JCN	C.CAPACITOR CH 50V 680P	1	
C6010	ECUM1H104ZFN	C.CAPACITOR CH 50V 0.1U	1	
C6011	ECEA0JKA470	E.CAPACITOR 6.3V 47U	1	
C6012	ECUM1H102KBN	C.CAPACITOR CH 50V 1000P	1	
C6013	ECUM1H180JCN	C.CAPACITOR CH 50V 18P	1	
C6016	ECUM1H180JCN	C.CAPACITOR CH 50V 18P	1	
C6017	ECEA1CKA100	E.CAPACITOR 16V 10U	1	
C6018	ECUM1H102KBN	C.CAPACITOR CH 50V 1000P	1	
C6019	ECUM1H151JCN	C.CAPACITOR CH 50V 150P	1	
C6022	ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	
C7301	ECUM1H103KBN	C.CAPACITOR CH 50V 0.01U	1	
C7302, 03	ECEA1HKNR47	E.CAPACITOR 50V 0.47U	2	
C7304	ECUM1H681JCN	C.CAPACITOR CH 50V 680P	1	
C7305, 06	ECUM1H123KBN	C.CAPACITOR CH 50V 0.012U	2	
C7307	ECUM1H681JCN	C.CAPACITOR CH 50V 680P	1	
C7308	ECEA1HKNR47	E.CAPACITOR 50V 0.47U	1	
C7309, 10	ECUM1H103KBN	C.CAPACITOR CH 50V 0.01U	2	
C7312, 13	ECEA1CKA100	E.CAPACITOR 16V 10U	2	
C7316	ECUM1H104ZFN	C.CAPACITOR CH 50V 0.1U	1	
C7317	ECEA0JKA101	E.CAPACITOR 6.3V 100U	1	
C7318	ECEA1CKA100	E.CAPACITOR 16V 10U	1	
C7319	ECEA1CKA470	E.CAPACITOR 16V 47U	1	
C7320	ECUM1H472KBN	C.CAPACITOR CH 50V 4700P	1	
C7321	ECEA1HKAR47	E.CAPACITOR 50V 0.47U	1	
C7322	ECEA1HKNR47	E.CAPACITOR 50V 0.47U	1	
C7323	ECUM1H104KBN	C.CAPACITOR CH 50V 0.1U	1	
C7326-28	ECUM1H152KBM	C.CAPACITOR CH 50V 1500P	3	[SUPPLIED FROM MBV]
C7501	ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	
C7502	ECEA1HKA100	E.CAPACITOR 50V 10U	1	
C7503	ECUM1H120JCN	C.CAPACITOR CH 50V 12P	1	
C7504	ECEA0JKA101	E.CAPACITOR 6.3V 100U	1	
C7505	ECUM1H104ZFN	C.CAPACITOR CH 50V 0.1U	1	
C7506	VCE0073	SUPER CAPACITOR	1	
C7507	ECEA0JKA221	E.CAPACITOR 6.3V 220U	1	
C7508	ECUM1H683ZFN	C.CAPACITOR CH 50V 0.068U	1	
C7509	ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	
C7601	ECEA0JKA101	E.CAPACITOR 6.3V 100U	1	
C7602	ECUM1H221JCN	C.CAPACITOR CH 50V 220P	1	
C7603	ECEA0JKA101	E.CAPACITOR 6.3V 100U	1	
C7605, 06	ECUM1H330JCN	C.CAPACITOR CH 50V 33P	2	
C7607	ECEA0JKA101	E.CAPACITOR 6.3V 100U	1	
C7608	ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	
C7610	ECEA1HKA100	E.CAPACITOR 50V 10U	1	
C7611	ECUM1H104ZFN	C.CAPACITOR CH 50V 0.1U	1	
C7612	ECUM1H221JCN	C.CAPACITOR CH 50V 220P	1	
C7613	ERJ6GMZ0R00	M.RESISTOR CH 1/10W 0	1	
C7615	ECQV1H104JM	P.CAPACITOR 50V 0.1U	1	
C7618	ECUM1E104KBN	C.CAPACITOR CH 25V 0.1U	1	
C7619	ECUM1H104ZFN	C.CAPACITOR CH 50V 0.1U	1	
C7620, 21	ECA1HAK2R2X	E.CAPACITOR 50V 2.2U	2	[SUPPLIED FROM MBV]
C7623	ECUM1H330JCN	C.CAPACITOR CH 50V 33P	1	

Ref. No.	Part No.	Part Name & Description	Pcs	Remarks
C7701, 02	ECUM1H104ZFN	C. CAPACITOR CH 50V 0. 1U	2	
C7705	ECUM1H104ZFN	C. CAPACITOR CH 50V 0. 1U	1	
C7708	ECUM1H104ZFN	C. CAPACITOR CH 50V 0. 1U	1	
C7709	ECEA0JKA470	E. CAPACITOR 6. 3V 47U	1	
C7711	ECUM1C105ZFN	C. CAPACITOR CH 16V 1U	1	
C7712, 13	ECUM1H103ZFN	C. CAPACITOR CH 50V 0. 01U	2	
C7714	ECUM1H470JCN	C. CAPACITOR CH 50V 47P	1	
C7715	ECUM1C105ZFN	C. CAPACITOR CH 16V 1U	1	
C7716	ECUM1H471JCN	C. CAPACITOR CH 50V 470P	1	
C7717	ECUM1C105ZFN	C. CAPACITOR CH 16V 1U	1	
C7718	ECUM1H471JCN	C. CAPACITOR CH 50V 470P	1	
C7720	ECEA0JKA470	E. CAPACITOR 6. 3V 47U	1	
C7721	ECEA1EKA4R7	E. CAPACITOR 25V 4. 7U	1	
C7722, 23	ECUM1H104ZFN	C. CAPACITOR CH 50V 0. 1U	2	
C7728	ECEA1EKA4R7	E. CAPACITOR 25V 4. 7U	1	
C7729	ECUM1H104ZFN	C. CAPACITOR CH 50V 0. 1U	1	
C7730	ECEA0JKA101	E. CAPACITOR 6. 3V 100U	1	
C7731	ECUM1H820JCN	C. CAPACITOR CH 50V 82P	1	
C7735, 36	ECUM1H104ZFN	C. CAPACITOR CH 50V 0. 1U	2	
C7739	ECUM1H104ZFN	C. CAPACITOR CH 50V 0. 1U	1	
C7740	ECEA0JKA470	E. CAPACITOR 6. 3V 47U	1	
C7742	ECUM1H104ZFN	C. CAPACITOR CH 50V 0. 1U	1	
C7749, 50	ECUM1H270JCN	C. CAPACITOR CH 50V 27P	2	
C7752	ECEA0JKA470	E. CAPACITOR 6. 3V 47U	1	
C7802	ECEA0JKA470	E. CAPACITOR 6. 3V 47U	1	
C7803	ECUM1C105ZFN	C. CAPACITOR CH 16V 1U	1	
C7804	ECUM1H221JCN	C. CAPACITOR CH 50V 220P	1	
D0702	MA77	DIODE	1	
D1003	1SS254	DIODE	1	
D1004	MA4051N-H	DIODE	1	
D1006	MA4051N-L	DIODE	1	
D1009	MA4051N-M	DIODE	1	
D1010	1SS254	DIODE	1	
D1015, 16	1SS254	DIODE	2	
D1017	MA4120N-M	DIODE	1	[SUPPLIED FROM MBV]
D1018, 19	1SS254	DIODE	2	
D1501	SIR505S	DIODE	1	
D2501, 02	1SS254	DIODE	2	
D3001	1SS254	DIODE	1	
D4905, 06	MA4075-M	DIODE	2	
D6002, 03	MA700	DIODE	2	
D7501	MA4220N-M	DIODE	1	[SUPPLIED FROM MBV]
D7503	RB441P	DIODE	1	
D7601	MA4300M	DIODE	1	
D7603, 04	1SS254	DIODE	2	
DP7501	VSL0533-B	FIP	1	[SUPPLIED FROM MBV]
IC0701	LA75503	IC	1	[SUPPLIED FROM MBV]
IC1001	PQ20VB2E	IC	1	[SUPPLIED FROM MBV]
IC1201	UPC1093J	IC	1	[SUPPLIED FROM MBV]
IC1501, 02	RPI354N	IC	2	[SUPPLIED FROM MBV]
IC2502	AN3811NK	IC	1	[SUPPLIED FROM MBV]
IC3001	TDA9735HV3	IC	1	[SUPPLIED FROM MBV]
IC3501	AN3368SB	IC	1	[SUPPLIED FROM MBV]
IC4001	NJM4558M	IC	1	
IC4501	TDA9605H	IC	1	[SUPPLIED FROM MBV]
IC4901	LA73021M	IC	1	
IC6001	M3777AVCEZ	IC	1	[SUPPLIED FROM MBV]
IC7301	TDA9873H	IC	1	[SUPPLIED FROM MBV]
IC7501	M35502AFP	IC	1	
IC7502	S80743AL	IC	1	
IC7503	PNA4611M02VT	IR RECEIVER UNIT	1	[SUPPLIED FROM MBV]
IC7504	RN5VD28AA	IC	1	[SUPPLIED FROM MBV]
IC7701	M3506SWVAX	IC	1	[SUPPLIED FROM MBV]
IC7703	M3062SVCEY	IC	1	[SUPPLIED FROM MBV]
IC7704	M24C16-WBN6	IC	1	[SUPPLIED FROM MBV]
⚠ IP1001, 02	UNH000300A	IC PROTECTOR	2	
⚠ IP1201, 02	UNH000300A	IC PROTECTOR	2	
JK4901	VJJ0377	RCA JACK	1	[SUPPLIED FROM MBV]
JK4903	VJS3634	21-PIN SCART JACK	1	[SUPPLIED FROM MBV]

Ref. No.	Part No.	Part Name & Description	Pcs	Remarks
K0703	ERJ3GEY0R00	M. RESISTOR CH 1/16W 0	1	
K0707	ERJ3GEY0R00	M. RESISTOR CH 1/16W 0	1	
K0709	ERJ3GEY0R00	M. RESISTOR CH 1/16W 0	1	
K2501	ERJ6GMZ0R00	M. RESISTOR CH 1/10W 0	1	
K2503	ERJ6GMZ0R00	M. RESISTOR CH 1/10W 0	1	
K3003	ERJ6GMZ0R00	M. RESISTOR CH 1/10W 0	1	
K7301	ERJ6GEY0R00	M. RESISTOR CH 1/10W 0	1	
K7603	ERJ6GMZ0R00	M. RESISTOR CH 1/10W 0	1	
L0701	ELJNAR18JF	CHIP INDUCTOR	1	[SUPPLIED FROM MBV]
L0703	ELJNA2R2JF	CHIP INDUCTOR	1	
L2503	VLQ0599J680	COIL 68UH	1	
L3001	VLQ0599J220	COIL 22UH	1	
L3003	VLQ0599J470	COIL 47UH	1	
L3004	VLQ0599J680	COIL 68UH	1	
L3005, 06	VLQ0599J101	COIL 100UH	2	
L3007	VLQ0599J330	COIL 33UH	1	
L3008	VLQ0599J470	COIL 47UH	1	
L3009	VLQ0599J390	COIL 39UH	1	
L3010	VLQ0599J560	COIL 56UH	1	
L3501	VLQ0599J330	COIL 33UH	1	
L4001	ELELN153JA	INDUCTOR 15000UH	1	[SUPPLIED FROM MBV]
L4007	VLQ0599J680	COIL 68UH	1	
L4501	VLQ0599J100	COIL 10UH	1	
L4901	VLQ0599JR22	COIL 0. 22UH	1	[SUPPLIED FROM MBV]
L4902-04	VLQ0599J680	COIL 68UH	3	
L6001	VLQ0599J101	COIL 100UH	1	
L6002	VLQ0599J2R2	COIL 2. 2UH	1	
L7601-04	VLQ0599J330	COIL 33UH	4	
L7605	VLQ0599J100	COIL 10UH	1	
L7701, 02	VLQ0599J390	COIL 39UH	2	
L7704	VLQ0599J390	COIL 39UH	1	
L7706	VLQ0599J100	COIL 10UH	1	
L7707	VLQ0599J220	COIL 22UH	1	
L7801	VLQ0599J680	COIL 68UH	1	
LB3001, 02	ERJ6GMZ0R00	M. RESISTOR CH 1/10W 0	2	
LB3501-04	VLP0145	COIL	4	
LB4901-04	ERJ6GMYJ221	M. RESISTOR CH 1/10W 220	4	
LB4906, 07	ERJ6GMYJ221	M. RESISTOR CH 1/10W 220	2	
P1001	VJS3917A016W	CONNECTOR (FEMALE) 16P	1	
P1501	VJS3837A002	CONNECTOR (FEMALE) 2P	1	
P2501	VJP3835A012	CONNECTOR (MALE) 12P	1	
P2502	VJS3537A009G	CONNECTOR (FEMALE) 9P	1	
P3502	VJS3537A010G	CONNECTOR (FEMALE) 10P	1	
P4002	VJS3837A002	CONNECTOR (FEMALE) 2P	1	
P4003	VJS3537A006G	CONNECTOR (FEMALE) 6P	1	
PK0701	VJR0826E009W	CONNECTOR (MALE) 9P	1	
PK7301	VJR0777B007W	CONNECTOR (MALE) 7P	1	
PK7302	VJR0777B006W	CONNECTOR (MALE) 6P	1	
PP0701	VJP3589A004B	CONNECTOR (MALE) 4P	1	
Q0702	2SD601A-S	TRANSISTOR	1	
Q1001	2SD601A	TRANSISTOR	1	
Q1002	2SD602A	TRANSISTOR	1	
Q1003	2SD1996-S	TRANSISTOR	1	
Q1004	2SB710A	TRANSISTOR	1	
Q1005, 06	2SD1996-S	TRANSISTOR	2	
Q1007	2SD602A-R	TRANSISTOR	1	
Q1009	2SD1996-S	TRANSISTOR	1	
Q1010	2SD601A	TRANSISTOR	1	
Q1201, 02	2SD1996-S	TRANSISTOR	2	
Q1501	PNB2301MBV	TRANSISTOR	1	
Q1502	PNB2301MAV	TRANSISTOR	1	
Q3003	2SB709A	TRANSISTOR	1	
Q4001	2SD1149	TRANSISTOR	1	
Q4002	2SD601A	TRANSISTOR	1	
Q4006	2SB710A-R	TRANSISTOR	1	
Q4007	2SD602A-R	TRANSISTOR	1	
Q4901	2SB709A	TRANSISTOR	1	
Q4903, 04	2SD601A	TRANSISTOR	2	
Q4905	2SD1328-S	TRANSISTOR	1	

Ref.No.	Part No.	Part Name & Description	Pcs	Remarks
Q7601	2SD601A	TRANSISTOR	1	
Q7604	2SD601A	TRANSISTOR	1	
Q7605	2SB709A	TRANSISTOR	1	
Q7606	2SD601A	TRANSISTOR	1	
Q7701	2SD601A	TRANSISTOR	1	
Q7702	2SB709A	TRANSISTOR	1	
Q7703	2SD601A	TRANSISTOR	1	
Q7709	2SB709A	TRANSISTOR	1	
Q7802	2SD601A	TRANSISTOR	1	
QR1001	MUN2112	TRANSISTOR-RESISTOR	1	
QR1002	MUN2211	TRANSISTOR-RESISTOR	1	
QR1003	MUN2212	TRANSISTOR-RESISTOR	1	
QR3006, 07	MUN2212	TRANSISTOR-RESISTOR	2	
QR4001	UN2217	TRANSISTOR-RESISTOR	1	
QR4002	MUN2113	TRANSISTOR-RESISTOR	1	
QR4004	MUN2212	TRANSISTOR-RESISTOR	1	
QR4006	MUN2111	TRANSISTOR-RESISTOR	1	
QR4502-05	UN2215	TRANSISTOR	4	
QR4506	MUN2113	TRANSISTOR-RESISTOR	1	
QR4903	MUN2212	TRANSISTOR-RESISTOR	1	
QR6002	MUN2211	TRANSISTOR-RESISTOR	1	
QR6003, 04	MUN2212	TRANSISTOR-RESISTOR	2	
QR6005	MUN2211	TRANSISTOR-RESISTOR	1	
QR6006	MUN2213	TRANSISTOR-RESISTOR	1	
QR6007	MUN2113	TRANSISTOR-RESISTOR	1	
R0705	ERJ3GEYJ362	M.RESISTOR CH 1/16W 3.6K	1	
R0707	ERJ3GEYJ393	M.RESISTOR CH 1/16W 39K	1	
R0708	ERJ3GEYJ103	M.RESISTOR CH 1/16W 10K	1	
R0711	ERJ3GEYJ181	M.RESISTOR CH 1/16W 180	1	
R0713	ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	1	
R0715	ERJ3GEYJ223	M.RESISTOR CH 1/16W 22K	1	
R0717	ERJ3GEYJ471	M.RESISTOR CH 1/16W 470	1	
R0719	ERJ3GEYJ472	M.RESISTOR CH 1/16W 4.7K	1	
R0725	ERJ6GEYJ101	M.RESISTOR CH 1/10W 100	1	
R0726	ERJ3GEYJ683	M.RESISTOR CH 1/16W 68K	1	
R0727	ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	1	
R0729	ERJ3GEYJ103	M.RESISTOR CH 1/16W 10K	1	
R0730	ERJ6GEYG103	M.RESISTOR CH 1/10W 10K	1	
R0740	ERJ3GEYG271	M.RESISTOR CH 1/16W 270	1	[SUPPLIED FROM MBV]
R0741	ERJ3GEYJ221	M.RESISTOR CH 1/16W 220	1	
R0742	ERJ8GEYJ151	M.RESISTOR CH 1/8W 150	1	
R0745	ERJ6GEYJ335	M.RESISTOR CH 1/10W 3.3M	1	
R1001, 02	ERJ6GMYJ333	M.RESISTOR CH 1/10W 33K	2	
R1003, 04	ERJ6GMYJ562	M.RESISTOR CH 1/10W 5.6K	2	
R1005	ERDS2TJ182	C.RESISTOR 1/4W 1.8K	1	
R1006	ERJ6GMYJ472	M.RESISTOR CH 1/10W 4.7K	1	
R1008	ERDS2TJ682	C.RESISTOR 1/4W 6.8K	1	
R1009, 10	ERJ6GMYJ103	M.RESISTOR CH 1/10W 10K	2	
R1011	ERJ6GMYG823	M.RESISTOR CH 1/10W 82K	1	
R1012	ERDS2TJ272	C.RESISTOR 1/4W 2.7K	1	
R1013	ERJ6GMYG153	M.RESISTOR CH 1/10W 15K	1	
R1014	ERJ6GMYG163	M.RESISTOR CH 1/10W 16K	1	
R1015	ERJ6GMYG123	M.RESISTOR CH 1/10W 12K	1	
R1016, 17	ERJ6GMYJ563	M.RESISTOR CH 1/10W 56K	2	
R1018, 19	ERJ6GMYJ683	M.RESISTOR CH 1/10W 68K	2	
R1022	ERJ6GMYJ103	M.RESISTOR CH 1/10W 10K	1	
R1023	ERJ6GMYJ123	M.RESISTOR CH 1/10W 12K	1	
R1024	ERJ6GMYJ103	M.RESISTOR CH 1/10W 10K	1	
R1026	ERJ6GMYJ152	M.RESISTOR CH 1/10W 1.5K	1	
R1027	ERDS2TJ123	C.RESISTOR 1/4W 12K	1	
R1028	ERJ6GMYJ102	M.RESISTOR CH 1/10W 1K	1	
R1029	ERJ6GMYG562	M.RESISTOR CH 1/10W 5.6K	1	
R1030	ERJ6GMYG622	M.RESISTOR CH 1/10W 6.2K	1	
R1201, 02	ERJ6GMYG272	M.RESISTOR CH 1/10W 2.7K	2	
R1203	ERJ6GMYJ623	M.RESISTOR CH 1/10W 6.2K	1	
R1204	ERDS2TJ102	C.RESISTOR 1/4W 1K	1	
R1501	ERJ6GMYJ101	M.RESISTOR CH 1/10W 100	1	
R1502	ERJ6GMYJ273	M.RESISTOR CH 1/10W 27K	1	
R1503	ERDS2TJ181	C.RESISTOR 1/4W 180	1	
R1504	ERJ6GMYJ273	M.RESISTOR CH 1/10W 27K	1	
R1505	ERDS2TJ121	C.RESISTOR 1/4W 120	1	
R2501	ERDS2TJ331	C.RESISTOR 1/4W 330	1	
R2502	ERJ6GMYG433	M.RESISTOR CH 1/10W 43K	1	
R2503	ERDS2TJ330	C.RESISTOR 1/4W 33	1	
R2504	ERJ6GMZ0R00	M.RESISTOR CH 1/10W 0	1	
R2505	ERJ6GMYJ103	M.RESISTOR CH 1/10W 10K	1	
R2506	ERJ6GMYJ102	M.RESISTOR CH 1/10W 1K	1	
R2507	ERJ6GMYJ392	M.RESISTOR CH 1/10W 3.9K	1	
R2508	ERDS2TJ330	C.RESISTOR 1/4W 33	1	
R2509	ERJ6GMYJ102	M.RESISTOR CH 1/10W 1K	1	
R2510	ERJ6GMYJ105	M.RESISTOR CH 1/10W 1M	1	
R2513	ERJ6GMYJ274	M.RESISTOR CH 1/10W 270	1	
R2514	ERJ6GMYJ103	M.RESISTOR CH 1/10W 10K	1	
R2517	ERDS1TJ1R2	C.RESISTOR 1/2W 1.2	1	
R2518	ERDS1TJ1R5	C.RESISTOR 1/2W 1.5	1	
R2519	ERDS2TJ330	C.RESISTOR 1/4W 33	1	
R3001	ERJ6GMYJ183	M.RESISTOR CH 1/10W 18K	1	
R3002	ERJ6GMYG301	M.RESISTOR CH 1/10W 300	1	
R3004	ERJ6GMYJ472	M.RESISTOR CH 1/10W 4.7K	1	
R3005	ERJ6GMZ0R00	M.RESISTOR CH 1/10W 0	1	
R3007	ERJ6GMZ0R00	M.RESISTOR CH 1/10W 0	1	
R3008	ERJ6GMYJ152	M.RESISTOR CH 1/10W 1.5K	1	
R3009	ERJ6GMYJ101	M.RESISTOR CH 1/10W 100	1	
R3010	ERJ6GMYJ473	M.RESISTOR CH 1/10W 47K	1	
R3011, 12	ERJ6GMYJ101	M.RESISTOR CH 1/10W 100	2	
R3020	ERJ6GMZ0R00	M.RESISTOR CH 1/10W 0	1	
R3021	ERJ6GMYJ684	M.RESISTOR CH 1/10W 680K	1	
R3022	ERJ6GMYJ224	M.RESISTOR CH 1/10W 220K	1	
R3023	ERJ6GMYJ332	M.RESISTOR CH 1/10W 3.3K	1	
R3024	ERJ6GMYG271	M.RESISTOR CH 1/10W 270	1	
R3025	ERJ6GMYG102	M.RESISTOR CH 1/10W 1K	1	
R3026	ERJ6GMYG152	M.RESISTOR CH 1/10W 1.5K	1	
R3027	ERJ6GMYJ562	M.RESISTOR CH 1/10W 5.6K	1	
R3028	ERJ6GMYG152	M.RESISTOR CH 1/10W 1.5K	1	
R3029	ERJ6GMYG331	M.RESISTOR CH 1/10W 330	1	
R3030	ERJ6GMYJ123	M.RESISTOR CH 1/10W 12K	1	
R3031	ERJ6GMYJ225	M.RESISTOR CH 1/10W 2.2M	1	
R3032	ERJ6GMYG391	M.RESISTOR CH 1/10W 390	1	
R3033	ERJ6GMYG471	M.RESISTOR CH 1/10W 470	1	
R3034	ERJ6GMYG561	M.RESISTOR CH 1/10W 560	1	
R3035	ERJ6GMYG271	M.RESISTOR CH 1/10W 270	1	
R3036	ERJ6GMYJ272	M.RESISTOR CH 1/10W 2.7K	1	
R3040	ERJ6GMZ0R00	M.RESISTOR CH 1/10W 0	1	
R3505	ERJ6GMYJ101	M.RESISTOR CH 1/10W 100	1	
R4001	ERJ6GMYG334	M.RESISTOR CH 1/10W 330K	1	
R4002	ERJ6GMYG103	M.RESISTOR CH 1/10W 10K	1	
R4003	ERJ6GMYJ753	M.RESISTOR CH 1/10W 75K	1	
R4004	ERJ6GMYJ153	M.RESISTOR CH 1/10W 15K	1	
R4005	ERJ6GMYG241	M.RESISTOR CH 1/10W 240	1	
R4006	ERJ6GMYJ223	M.RESISTOR CH 1/10W 22K	1	
R4007	ERJ6GMYJ472	M.RESISTOR CH 1/10W 4.7K	1	
R4008	ERJ6GMYJ222	M.RESISTOR CH 1/10W 2.2K	1	
R4009	ERJ6GMYJ181	M.RESISTOR CH 1/10W 180	1	
R4010	ERJ6GMYJ391	M.RESISTOR CH 1/10W 390	1	
R4011	ERJ6GMYJ392	M.RESISTOR CH 1/10W 3.9K	1	
R4012	ERJ6GMZ0R00	M.RESISTOR CH 1/10W 0	1	
R4014	ERJ6GMYK225	M.RESISTOR CH 1/10W 2.2M	1	
R4015	ERJ6GMYJ272	M.RESISTOR CH 1/10W 2.7K	1	
R4016	ERJ6GMYJ182	M.RESISTOR CH 1/10W 1.8K	1	
R4019	ERJ6GMYJ101	M.RESISTOR CH 1/10W 100	1	
R4036	ERJ6GMYJ682	M.RESISTOR CH 1/10W 6.8K	1	
R4037	ERJ6GMYJ222	M.RESISTOR CH 1/10W 2.2K	1	
R4038, 39	ERJ6GMYJ154	M.RESISTOR CH 1/10W 150K	2	
R4049	ERJ6GMYJ473	M.RESISTOR CH 1/10W 47K	1	
R4060	ERJ6GMYJ822	M.RESISTOR CH 1/10W 8.2K	1	
R4061	ERJ6GMYJ332	M.RESISTOR CH 1/10W 3.3K	1	
R4062	ERJ6GMYJ272	M.RESISTOR CH 1/10W 2.7K	1	
R4063	ERJ6GMYJ332	M.RESISTOR CH 1/10W 3.3K	1	
R4067	ERJ6GMYJ682	M.RESISTOR CH 1/10W 6.8K	1	
R4068	ERJ6GMYJ222	M.RESISTOR CH 1/10W 2.2K	1	
R4069, 70	ERJ6GMYJ154	M.RESISTOR CH 1/10W 150K	2	
R4071	ERJ6GMYJ103	M.RESISTOR CH 1/10W 10K	1	
R4072	ERJ6GMYJ224	M.RESISTOR CH 1/10W 220K	1	
R4073	ERJ6GMYJ472	M.RESISTOR CH 1/10W 4.7K	1	
R4503-06	ERJ6GMYJ753	M.RESISTOR CH 1/10W 75K	4	
R4509	ERJ6GMYK335	M.RESISTOR CH 1/10W 3.3M	1	
R4510	ERJ6GMYJ221	M.RESISTOR CH 1/10W 220	1	
R4512	ERJ6GMYJ221	M.RESISTOR CH 1/10W 220	1	

Ref.No.	Part No.	Part Name & Description	Pcs	Remarks
R4514	ERJ6GMYJ221	M.RESISTOR CH 1/10W 220	1	
R4516,17	ERJ6GMYJ104	M.RESISTOR CH 1/10W 100K	2	
R4518,19	ERJ6GMYJ221	M.RESISTOR CH 1/10W 220	2	
R4520	ERJ6GMYJ223	M.RESISTOR CH 1/10W 22K	1	
R4521	ERJ6GMYJ393	M.RESISTOR CH 1/10W 39K	1	
R4522	ERJ6GMYJ332	M.RESISTOR CH 1/10W 3.3K	1	
R4523	ERJ6RBD393	M.RESISTOR CH 1/10W 39K	1	[SUPPLIED FROM MBV]
R4524	ERJ6GMYJ332	M.RESISTOR CH 1/10W 3.3K	1	
R4525	ERJ6GMYJ393	M.RESISTOR CH 1/10W 39K	1	
R4526	ERJ6GMYJ221	M.RESISTOR CH 1/10W 220	1	
R4527	ERJ6GMYJ103	M.RESISTOR CH 1/10W 10K	1	
R4528	ERJ6GMYJ102	M.RESISTOR CH 1/10W 1K	1	
R4529,30	ERJ6GMYJ391	M.RESISTOR CH 1/10W 390	2	
R4539	ERJ6GMYJ223	M.RESISTOR CH 1/10W 22K	1	
R4901,02	ERJ6GMYJ331	M.RESISTOR CH 1/10W 330	2	
R4905	ERDS2TJ471	C.RESISTOR 1/4W 470	1	
R4907,08	ERJ6GMYJ221	M.RESISTOR CH 1/10W 220	2	
R4911	ERJ6GMYJ221	M.RESISTOR CH 1/10W 220	1	
R4912	ERJ6GMYJ472	M.RESISTOR CH 1/10W 4.7K	1	
R4913	ERJ6GMYJ153	M.RESISTOR CH 1/10W 15K	1	
R4915	ERJ6GMYJ223	M.RESISTOR CH 1/10W 22K	1	
R4916	ERJ6GMYJ471	M.RESISTOR CH 1/10W 470	1	
R4921	ERJ6GMYJ331	M.RESISTOR CH 1/10W 330	1	
R4923	ERJ6GMYJ331	M.RESISTOR CH 1/10W 330	1	
R4924,25	ERJ6GMYJ750	M.RESISTOR CH 1/10W 75	2	
R4926,27	ERJ6GMYJ473	M.RESISTOR CH 1/10W 47K	2	
R4928,29	ERJ6GMYJ750	M.RESISTOR CH 1/10W 75	2	
R4931	ERJ6GMYJ103	M.RESISTOR CH 1/10W 10K	1	
R4933	ERJ6GMYJ911	M.RESISTOR CH 1/10W 910	1	
R4934	ERJ6GMYJ102	M.RESISTOR CH 1/10W 1K	1	
R6001	ERJ6GMYJ562	M.RESISTOR CH 1/10W 5.6K	1	
R6002,03	ERJ6GMYJ102	M.RESISTOR CH 1/10W 1K	2	
R6005	ERJ6GMYJ103	M.RESISTOR CH 1/10W 10K	1	
R6006	ERJ6GMYJ102	M.RESISTOR CH 1/10W 1K	1	
R6007	ERJ6GMYJ273	M.RESISTOR CH 1/10W 27K	1	
R6008	ERJ6GMYJ224	M.RESISTOR CH 1/10W 220K	1	
R6010	ERJ6GMYJ153	M.RESISTOR CH 1/10W 15K	1	
R6011	ERJ6GMYJ103	M.RESISTOR CH 1/10W 10K	1	
R6012,13	ERJ6GMYJ472	M.RESISTOR CH 1/10W 4.7K	2	
R6014	ERJ6GMZ0R00	M.RESISTOR CH 1/10W 0	1	
R6015	ERJ6GMYJ103	M.RESISTOR CH 1/10W 10K	1	
R6016	ERJ6GMYJ153	M.RESISTOR CH 1/10W 15K	1	
R6017	ERJ6GMYJ682	M.RESISTOR CH 1/10W 6.8K	1	
R6018	ERDS2TJ221	C.RESISTOR 1/4W 220	1	
R6020	ERJ6GMYJ102	M.RESISTOR CH 1/10W 1K	1	
R6022	ERJ6GMYJ102	M.RESISTOR CH 1/10W 1K	1	
R6023-30	ERJ6GMYJ221	M.RESISTOR CH 1/10W 220	8	
R6031	ERJ6GMYJ273	M.RESISTOR CH 1/10W 27K	1	
R6032	ERJ6GMYJ393	M.RESISTOR CH 1/10W 39K	1	
R6033	ERJ6GMYJ273	M.RESISTOR CH 1/10W 27K	1	
R6036	ERJ6GMYJ101	M.RESISTOR CH 1/10W 100	1	
R6038	ERJ6GMYJ433	M.RESISTOR CH 1/10W 43K	1	
R6039	ERJ6GMYJ393	M.RESISTOR CH 1/10W 39K	1	
R7301	ERJ6GEY0R00	M.RESISTOR CH 1/10W 0	1	
R7304	ERJ6GEYJ472	M.RESISTOR CH 1/10W 4.7K	1	
R7305,06	ERJ6GEYJ562	M.RESISTOR CH 1/10W 5.6K	2	
R7307,08	ERJ6GEYG682	M.RESISTOR CH 1/10W 6.8K	2	
R7309	ERJ6GEYG221	M.RESISTOR CH 1/10W 220	1	
R7311	ERJ6GEYJ752	M.RESISTOR CH 1/10W 7.5K	1	
R7312,13	ERJ6GEYJ101	M.RESISTOR CH 1/10W 100	2	
R7314	ERJ6GEYG332	M.RESISTOR CH 1/10W 3.3K	1	
R7315	ERJ6GEY0R00	M.RESISTOR CH 1/10W 0	1	
R7316	ERJ6GEYG682	M.RESISTOR CH 1/10W 6.8K	1	
R7317,18	ERJ6GEY0R00	M.RESISTOR CH 1/10W 0	2	
R7319,20	ERJ6GEYG332	M.RESISTOR CH 1/10W 3.3K	2	
R7501	ERDS2TJ150	C.RESISTOR 1/4W 15	1	
R7502	ERJ6GMYJ101	M.RESISTOR CH 1/10W 100	1	
R7503,04	ERJ6GMYJ202	M.RESISTOR CH 1/10W 2K	2	
R7505	ERJ6GMZ0R00	M.RESISTOR CH 1/10W 0	1	
R7506-08	ERJ6GMYJ332	M.RESISTOR CH 1/10W 3.3K	3	
R7509	ERJ6GMYJ822	M.RESISTOR CH 1/10W 8.2K	1	
R7510	ERJ6GMYJ562	M.RESISTOR CH 1/10W 5.6K	1	
R7511	ERJ6GMYJ432	M.RESISTOR CH 1/10W 4.3K	1	
R7512,13	ERJ6GMYJ103	M.RESISTOR CH 1/10W 10K	2	
R7514	ERJ6GMYJ822	M.RESISTOR CH 1/10W 8.2K	1	

Ref.No.	Part No.	Part Name & Description	Pcs	Remarks
R7515	ERJ6GMYJ562	M.RESISTOR CH 1/10W 5.6K	1	
R7516	ERJ6GMYJ432	M.RESISTOR CH 1/10W 4.3K	1	
R7517	ERJ6GMYJ103	M.RESISTOR CH 1/10W 10K	1	
R7520,21	ERJ6GMYJ223	M.RESISTOR CH 1/10W 22K	2	
R7522	ERJ6GMYJ181	M.RESISTOR CH 1/10W 180	1	
R7523-26	ERJ6GMYJ303	M.RESISTOR CH 1/10W 30K	4	
R7538	ERJ6GMYJ432	M.RESISTOR CH 1/10W 4.3K	1	
R7549	ERDS2TJ150	C.RESISTOR 1/4W 15	1	
R7601,02	ERJ6GMYJ101	M.RESISTOR CH 1/10W 100	2	
R7603	ERJ6GMYJ102	M.RESISTOR CH 1/10W 1K	1	
R7606,07	ERJ6GMYJ101	M.RESISTOR CH 1/10W 100	2	
R7608,09	ERDS2TJ331	C.RESISTOR 1/4W 330	2	
R7610	ERJ6GMYJ151	M.RESISTOR CH 1/10W 150	1	
R7612	ERJ6GMZ0R00	M.RESISTOR CH 1/10W 0	1	
R7613	ERJ6GMYJ151	M.RESISTOR CH 1/10W 150	1	
R7614	ERJ6GMYJ561	M.RESISTOR CH 1/10W 560	1	
R7615	ERJ6GMYJ103	M.RESISTOR CH 1/10W 10K	1	
R7620	ERJ6GMYJ104	M.RESISTOR CH 1/10W 100K	1	
R7621	ERJ6GMYJ182	M.RESISTOR CH 1/10W 1.8K	1	
R7622,23	ERJ6GMYJ154	M.RESISTOR CH 1/10W 150K	2	
R7704	ERJ6GMYJ472	M.RESISTOR CH 1/10W 4.7K	1	
R7705	ERJ6GMYJ473	M.RESISTOR CH 1/10W 47K	1	
R7707	ERJ6GMYJ471	M.RESISTOR CH 1/10W 470	1	
R7708-10	ERJ6GMYJ511	M.RESISTOR CH 1/10W 510	3	
R7711	ERJ6GMYJ104	M.RESISTOR CH 1/10W 100K	1	
R7712	ERJ6GMYJ102	M.RESISTOR CH 1/10W 1K	1	
R7713	ERJ6GMYJ104	M.RESISTOR CH 1/10W 100K	1	
R7714	ERJ6GMYG153	M.RESISTOR CH 1/10W 15K	1	
R7715	ERJ6GMYG152	M.RESISTOR CH 1/10W 1.5K	1	
R7716	ERJ6GMYG562	M.RESISTOR CH 1/10W 5.6K	1	
R7729	ERJ6GMYJ102	M.RESISTOR CH 1/10W 1K	1	
R7730	ERJ6GMYJ332	M.RESISTOR CH 1/10W 3.3K	1	
R7740	ERJ6GMYJ472	M.RESISTOR CH 1/10W 4.7K	1	
R7741-44	ERJ6GMYJ101	M.RESISTOR CH 1/10W 100	4	
R7746	ERJ6GMYJ101	M.RESISTOR CH 1/10W 100	1	
R7751,52	ERJ6GMYJ101	M.RESISTOR CH 1/10W 100	2	
R7753	ERJ6GMYJ272	M.RESISTOR CH 1/10W 2.7K	1	
R7754-57	ERJ6GMYJ101	M.RESISTOR CH 1/10W 100	4	
R7759	ERJ6GMYJ222	M.RESISTOR CH 1/10W 2.2K	1	
R7760	ERJ6GMZ0R00	M.RESISTOR CH 1/10W 0	1	
R7761	ERJ6GMYJ472	M.RESISTOR CH 1/10W 4.7K	1	
R7765-67	ERJ6GMYJ101	M.RESISTOR CH 1/10W 100	3	
R7768	ERJ6GMYJ472	M.RESISTOR CH 1/10W 4.7K	1	
R7769	ERJ6GMYJ101	M.RESISTOR CH 1/10W 100	1	
R7770	ERJ6GMYJ472	M.RESISTOR CH 1/10W 4.7K	1	
R7771-78	ERJ6GMYJ101	M.RESISTOR CH 1/10W 100	8	
R7784,85	ERJ6GMYJ472	M.RESISTOR CH 1/10W 4.7K	2	
R7792-99	ERJ6GMYJ101	M.RESISTOR CH 1/10W 100	8	
R7802,03	ERJ6GMZ0R00	M.RESISTOR CH 1/10W 0	2	
R7804,05	ERJ6GMYJ102	M.RESISTOR CH 1/10W 1K	2	
R7807	ERJ6GMYJ102	M.RESISTOR CH 1/10W 1K	1	
R7808	ERJ6GMYJ473	M.RESISTOR CH 1/10W 47K	1	
R7809	ERJ6GMYJ472	M.RESISTOR CH 1/10W 4.7K	1	
S1501	VSS0520-3	MODE SELECT SWITCH	1	[SUPPLIED FROM MBV]
S7501	VES0834	S-TAB SWITCH	1	
S7502-06	EVQ11L07B	SWITCH	5	
T0701	EQV5EC082P	TRANSFORMER	1	[SUPPLIED FROM MBV]
T4001	EQQ7QF024P	TRANSFORMER	1	
⚠ TU7601	ENG47306G1	TUNER	1	[SUPPLIED FROM MBV]
VR0701	EVNCBAA00B14	V.RESISTOR	1	
VR7301	EVNCBAA00B14	V.RESISTOR	1	
X0701	VLF1416	FILTER	1	[SUPPLIED FROM MBV]
X0704	VLF1493	FILTER	1	[SUPPLIED FROM MBV]
X3001	VSX0162	CRYSTAL OSCILLATOR	1	
X6001	VSX0830	CRYSTAL OSCILLATOR	1	
X6002	VSX0660	CRYSTAL OSCILLATOR	1	
X7301	VSX1086	CRYSTAL OSCILLATOR	1	
X7701	VSX1043	CRYSTAL OSCILLATOR	1	
		MISCELLANEOUS		

Ref. No.	Part No.	Part Name & Description	Pcs	Remarks
	VSC4999	SHIELD CASE (MIDDLE)	1	[SUPPLIED FROM MBV]
	VSC4998	HA ANGLE	1	[SUPPLIED FROM MBV]
	VXQ0648	FIP HOLDER	1	
	VMP4894	SUPPORT ANGLE	1	FOR DECODER C. B. A.
	VMP4471	TV DEMODULATOR ANGLE	1	FOR TV DEMODULATOR C. B. A.
■	VEP06D57B	MAIN C. B. A.		[SUPPLIED FROM MBV]
				(RTL) NV-FJ610ECYS/ECYK
				NV-FJ603EPYK
C0701	ECUM1C105ZFN	C. CAPACITOR CH 16V 1U	1	
C0702	ECUX1H102KBV	C. CAPACITOR CH 50V 1000P	1	
C0703	ECUM1A105KBN	C. CAPACITOR CH 10V 1U	1	
C0704	ECUM1E333KBN	C. CAPACITOR CH 25V 0. 033U	1	
C0706	ECEA1HKA010	E. CAPACITOR 50V 1U	1	
C0707	ECEA1HKA2R2	E. CAPACITOR 50V 2. 2U	1	
C0708	ECEA1HKAR47	E. CAPACITOR 50V 0. 47U	1	
C0710	ECUX1H103ZFV	C. CAPACITOR CH 50V 0. 01U	1	
C0711	ECEA1CKA220	E. CAPACITOR 16V 22U	1	
C0712	ECUX1C104ZFV	C. CAPACITOR CH 16V 0. 1U	1	
C0713	EEUFA1A391	E. CAPACITOR 10V 390U	1	
C0714	ECUM1C105ZFN	C. CAPACITOR CH 16V 1U	1	
C0715	ECUX1H030CCV	C. CAPACITOR CH 50V 3P	1	
C0716	ECUX1H123KBV	C. CAPACITOR CH 50V 0. 012U	1	
C0717	ECUM1H330GUV	C. CAPACITOR CH 50V 33P	1	
C0719	ECUX1E104ZFV	C. CAPACITOR CH 25V 0. 1U	1	
C0721	ECUX1H181JCV	C. CAPACITOR CH 50V 180P	1	
C0724	ECUX1H221KBV	C. CAPACITOR CH 50V 220P	1	
C1001	ECEA1AKG220	E. CAPACITOR 10V 22U	1	[SUPPLIED FROM MBV]
C1002	ECUM1H103ZFN	C. CAPACITOR CH 50V 0. 01U	1	
C1003	ECEA1CGE470	E. CAPACITOR 16V 47U	1	
C1004	ECUM1H103ZFN	C. CAPACITOR CH 50V 0. 01U	1	
C1005	ECEA1AKA470	E. CAPACITOR 10V 47U	1	
C1006, 07	ECUM1H103ZFN	C. CAPACITOR CH 50V 0. 01U	2	
C1008	ECA1CAK470X	E. CAPACITOR 16V 47U	1	
C1009	ECEA0JKA470	E. CAPACITOR 6. 3V 47U	1	
C1010	ECEA1CGE470	E. CAPACITOR 16V 47U	1	
C1011, 12	ECEA1CKA100	E. CAPACITOR 16V 10U	2	
C1015	ECUM1H102KBN	C. CAPACITOR CH 50V 1000P	1	
C1016	ECA1CAK100X	E. CAPACITOR 16V 10U	1	
C1017	ECEA1HKA4R7	E. CAPACITOR 50V 4. 7U	1	
C1201	ECEA0JKA101	E. CAPACITOR 6. 3V 100U	1	
C1202	ECUM1H103ZFN	C. CAPACITOR CH 50V 0. 01U	1	
C1203	ECEA1AKA220	E. CAPACITOR 10V 22U	1	
C1204	ECUM1H103ZFN	C. CAPACITOR CH 50V 0. 01U	1	
C1205	ECEA0JKA470	E. CAPACITOR 6. 3V 47U	1	
C1206, 07	ECUM1E104KBN	C. CAPACITOR CH 25V 0. 1U	2	
C1208	ECUM1H103ZFN	C. CAPACITOR CH 50V 0. 01U	1	
C1501	ECUM1H221JCN	C. CAPACITOR CH 50V 220P	1	
C2501	ECUM1C474ZFN	C. CAPACITOR CH 16V 0. 47U	1	
C2502	ECEA1VKN4R7	E. CAPACITOR 35V 4. 7U	1	
C2503	ECUM1H563ZFN	C. CAPACITOR CH 50V 0. 056U	1	
C2504	ECEA1EKA470	E. CAPACITOR 25V 47U	1	
C2505	ECUM1H330JCN	C. CAPACITOR CH 50V 33P	1	
C2506	ECEA0JKN220	E. CAPACITOR 6. 3V 22U	1	
C2507	ECUM1H104ZFN	C. CAPACITOR CH 50V 0. 1U	1	
C2508	ECEA1EKA4R7	E. CAPACITOR 25V 4. 7U	1	
C2509, 10	ECUM1H563ZFN	C. CAPACITOR CH 50V 0. 056U	2	
C2511	ECEA1VKN4R7	E. CAPACITOR 35V 4. 7U	1	
C2512	ECUM1H392KBN	C. CAPACITOR CH 50V 3900P	1	
C2516	ECEA0JKA221	E. CAPACITOR 6. 3V 220U	1	
C2518	ECUM1H473ZFN	C. CAPACITOR CH 50V 0. 047U	1	
C2521	ECEA1EKA470	E. CAPACITOR 25V 47U	1	
C2522	ECUM1E683KBN	C. CAPACITOR CH 25V 0. 068U	1	
C2523-25	ECUM1C154KBN	C. CAPACITOR CH 16V 0. 15U	3	
C2526	ECEA1VKN4R7	E. CAPACITOR 35V 4. 7U	1	
C2535, 36	ECUM1H104ZFN	C. CAPACITOR CH 50V 0. 1U	2	
C3002, 03	ECUM1H102KBN	C. CAPACITOR CH 50V 1000P	2	
C3004	ECEA1HKA010	E. CAPACITOR 50V 1U	1	
C3005	ECUM1H680JCN	C. CAPACITOR CH 50V 68P	1	
C3006	ECUM1H060DCN	C. CAPACITOR CH 50V 6P	1	
C3007	ECUM1E104KBN	C. CAPACITOR CH 25V 0. 1U	1	
C3008	ECUM1H103ZFN	C. CAPACITOR CH 50V 0. 01U	1	
C3011	ECEA0JKA221	E. CAPACITOR 6. 3V 220U	1	
C3012, 13	ECUM1H104ZFN	C. CAPACITOR CH 50V 0. 1U	2	
C3014	ECUM1H103ZFN	C. CAPACITOR CH 50V 0. 01U	1	
C3015	ECEA1HKA010	E. CAPACITOR 50V 1U	1	
C3016	ECUM1H333KBN	C. CAPACITOR CH 50V 0. 033U	1	
C3017	ECUM1H104ZFN	C. CAPACITOR CH 50V 0. 1U	1	
C3018	ECEA0JKA101	E. CAPACITOR 6. 3V 100U	1	
C3019	ECUM1E104KBN	C. CAPACITOR CH 25V 0. 1U	1	
C3020	ECUM1H222KBN	C. CAPACITOR CH 50V 2200P	1	
C3021	ERJ6GMZOROO	M. RESISTOR CH 1/10W 0	1	
C3024	ECEA0JKA470	E. CAPACITOR 6. 3V 47U	1	
C3025	ECEA0JKA101	E. CAPACITOR 6. 3V 100U	1	
C3026	ECUM1H104ZFN	C. CAPACITOR CH 50V 0. 1U	1	
C3029	ECUM1H103ZFN	C. CAPACITOR CH 50V 0. 01U	1	
C3030	ECUM1H222KBN	C. CAPACITOR CH 50V 2200P	1	
C3031	ECEA1HKAR47	E. CAPACITOR 50V 0. 47U	1	
C3033	ECEA1EKN4R7	E. CAPACITOR 25V 4. 7U	1	
C3034	ECEA1EKA4R7	E. CAPACITOR 25V 4. 7U	1	
C3035	ECUM1H104ZFN	C. CAPACITOR CH 50V 0. 1U	1	
C3036	ECEA0JKA221	E. CAPACITOR 6. 3V 220U	1	
C3037	ECUM1H104ZFN	C. CAPACITOR CH 50V 0. 1U	1	
C3038	ECEA0JKA101	E. CAPACITOR 6. 3V 100U	1	
C3039	ECEA0JKA220	E. CAPACITOR 6. 3V 22U	1	
C3040	ECUM1H223KBN	C. CAPACITOR CH 50V 0. 022U	1	
C3041	ECEA1CKA100	E. CAPACITOR 16V 10U	1	
C3042	ECUM1H560JCN	C. CAPACITOR CH 50V 56P	1	
C3043	ECUM1H104ZFN	C. CAPACITOR CH 50V 0. 1U	1	
C3044	ECUM1H821JCN	C. CAPACITOR CH 50V 820P	1	
C3045	ECUM1H221JCN	C. CAPACITOR CH 50V 220P	1	
C3046	ECUM1H220JCN	C. CAPACITOR CH 50V 22P	1	
C3047	ECEA0JKA220	E. CAPACITOR 6. 3V 22U	1	
C3048	ECUM1H560JCN	C. CAPACITOR CH 50V 56P	1	
C3049	ECUM1H681JCN	C. CAPACITOR CH 50V 680P	1	
C3050	ECUM1H680JCN	C. CAPACITOR CH 50V 68P	1	
C3051	ECUM1H220JCN	C. CAPACITOR CH 50V 22P	1	
C3052, 53	ECUM1H104ZFN	C. CAPACITOR CH 50V 0. 1U	2	
C3054, 55	ECUM1E104KBN	C. CAPACITOR CH 25V 0. 1U	2	
C3502	ECUM1H103KBN	C. CAPACITOR CH 50V 0. 01U	1	
C3504	ECUM1H103KBN	C. CAPACITOR CH 50V 0. 01U	1	
C3505	ECEA0JKS470	E. CAPACITOR 6. 3V 47U	1	
C3506	ECUM1H103KBN	C. CAPACITOR CH 50V 0. 01U	1	
C3507-10	ECUM1E104KBN	C. CAPACITOR CH 25V 0. 1U	4	
C4001	ECEA1HKN010	E. CAPACITOR 50V 1U	1	
C4002	ECQB1H822JF	P. CAPACITOR 50V 8200P	1	
C4003	ECEA1HKA010	E. CAPACITOR 50V 1U	1	
C4004	ECEA1EKA4R7	E. CAPACITOR 25V 4. 7U	1	
C4005	ECUM1H272KBN	C. CAPACITOR CH 50V 2700P	1	
C4006	ECEA0JKA220	E. CAPACITOR 6. 3V 22U	1	
C4007	ECUM1H122JCN	C. CAPACITOR CH 50V 1200P	1	[SUPPLIED FROM MBV]
C4010, 11	ECUM1H153KBN	C. CAPACITOR CH 50V 0. 015U	2	
C4012	ECEA1HKA010	E. CAPACITOR 50V 1U	1	
C4013	ECEA0JKA470	E. CAPACITOR 6. 3V 47U	1	
C4014	ECEA1HKA0R1	E. CAPACITOR 50V 0. 1U	1	
C4015	ECEA0JKA220	E. CAPACITOR 6. 3V 22U	1	
C4016	ECEA1HKA0R1	E. CAPACITOR 50V 0. 1U	1	
C4018	ECUM1H104ZFN	C. CAPACITOR CH 50V 0. 1U	1	
C4019	ECEA0JKA470	E. CAPACITOR 6. 3V 47U	1	
C4045	ECUM1H103KBN	C. CAPACITOR CH 50V 0. 01U	1	
C4046-48	ECA1CAK100X	E. CAPACITOR 16V 10U	3	
C4068	ECQB1H223JF	P. CAPACITOR 50V 0. 022U	1	
C4070	ECUM1H221JCN	C. CAPACITOR CH 50V 220P	1	
C4072	ECEA0JKA221	E. CAPACITOR 6. 3V 220U	1	
C4073	ECUM1H223KBN	C. CAPACITOR CH 50V 0. 022U	1	
C4074	ECUM1H152JCN	C. CAPACITOR CH 50V 1500P	1	
C4075	ECEA1AKA220	E. CAPACITOR 10V 22U	1	
C4501, 02	ECEA1HKNR47	E. CAPACITOR 50V 0. 47U	2	[SUPPLIED FROM MBV]
C4505-08	ECA1HAKR22X	E. CAPACITOR 50V 0. 22U	4	
C4511, 12	ECEA1CKA100	E. CAPACITOR 16V 10U	2	
C4513-16	ECA1CAK100X	E. CAPACITOR 16V 10U	4	
C4517	ECEA1CKA100	E. CAPACITOR 16V 10U	1	
C4518	ECEA1HKAR22	E. CAPACITOR 50V 0. 22U	1	
C4519	ECA1CAK100X	E. CAPACITOR 16V 10U	1	
C4520	ECQB1H562JF	P. CAPACITOR 50V 5600P	1	
C4521	ECA1CAK470X	E. CAPACITOR 16V 47U	1	
C4522	ECA1CAK100X	E. CAPACITOR 16V 10U	1	
C4523	ECA1HAK2R2X	E. CAPACITOR 50V 2. 2U	1	[SUPPLIED FROM MBV]

Ref. No.	Part No.	Part Name & Description	Pcs	Remarks
C4524	ECA1CAK100X	E. CAPACITOR 16V 10U	1	
C4525	ECA1CAK470X	E. CAPACITOR 16V 47U	1	
C4526	ECQB1H562JF	P. CAPACITOR 50V 5600P	1	
C4527	ECA1CAK100X	E. CAPACITOR 16V 10U	1	
C4528	ECUM1H104ZFN	C. CAPACITOR CH 50V 0. 1U	1	
C4529	ECEA1CKS470	E. CAPACITOR 16V 47U	1	
C4530	ECUM1E104KBN	C. CAPACITOR CH 25V 0. 1U	1	
C4531	ECUM1H103KBN	C. CAPACITOR CH 50V 0. 01U	1	
C4532	ECUM1H561JCN	C. CAPACITOR CH 50V 560P	1	
C4533	ECUM1H104ZFN	C. CAPACITOR CH 50V 0. 1U	1	
C4534	ECEA0JKS331	E. CAPACITOR 6. 3V 330U	1	
C4535	ECUM1H471JCN	C. CAPACITOR CH 50V 470P	1	
C4540	ECUM1H102KBN	C. CAPACITOR CH 50V 1000P	1	
C4901, 02	ECUM1H470JCN	C. CAPACITOR CH 50V 47P	2	
C4903-09	ECUM1H471KBN	C. CAPACITOR CH 50V 470P	7	
C4912, 13	ECUM1H470JCN	C. CAPACITOR CH 50V 47P	2	
C4914	ECUM1H471KBN	C. CAPACITOR CH 50V 470P	1	
C4917	ECUM1E104KBN	C. CAPACITOR CH 25V 0. 1U	1	
C4921	ECUM1E104KBN	C. CAPACITOR CH 25V 0. 1U	1	
C4922	ECEA1CKA470	E. CAPACITOR 16V 47U	1	
C4923	ECUM1E104KBN	C. CAPACITOR CH 25V 0. 1U	1	
C4925	ECUM1H104ZFN	C. CAPACITOR CH 50V 0. 1U	1	
C4926	ECEA1CKA470	E. CAPACITOR 16V 47U	1	
C4927	ECUM1H104ZFN	C. CAPACITOR CH 50V 0. 1U	1	
C4928	ECEA0JKA331	E. CAPACITOR 6. 3V 330U	1	
C4929	ECUM1H104ZFN	C. CAPACITOR CH 50V 0. 1U	1	
C4932	ECUM1H104ZFN	C. CAPACITOR CH 50V 0. 1U	1	
C4933	ECEA1CKA470	E. CAPACITOR 16V 47U	1	
C4935	ECUM1H222KBN	C. CAPACITOR CH 50V 2200P	1	
C4938	ECUM1H222KBN	C. CAPACITOR CH 50V 2200P	1	
C4939	ECUM1H104ZFN	C. CAPACITOR CH 50V 0. 1U	1	
C4940	ECEA0JKA331	E. CAPACITOR 6. 3V 330U	1	
C4941	ECUM1E104KBN	C. CAPACITOR CH 25V 0. 1U	1	
C6001	ECEA0JKA470	E. CAPACITOR 6. 3V 47U	1	
C6002	ECUM1H103ZFN	C. CAPACITOR CH 50V 0. 01U	1	
C6003	ECUM1H200JCN	C. CAPACITOR CH 50V 20P	1	
C6004	ECUM1H120JCN	C. CAPACITOR CH 50V 12P	1	
C6005	ECUM1H103ZFN	C. CAPACITOR CH 50V 0. 01U	1	
C6006	ECUM1H471JCN	C. CAPACITOR CH 50V 470P	1	
C6007, 08	ECUM1H121JCN	C. CAPACITOR CH 50V 120P	2	
C6009	ECUM1H681JCN	C. CAPACITOR CH 50V 680P	1	
C6010	ECUM1H104ZFN	C. CAPACITOR CH 50V 0. 1U	1	
C6011	ECEA0JKA470	E. CAPACITOR 6. 3V 47U	1	
C6012	ECUM1H102KBN	C. CAPACITOR CH 50V 1000P	1	
C6013	ECUM1H180JCN	C. CAPACITOR CH 50V 18P	1	
C6016	ECUM1H180JCN	C. CAPACITOR CH 50V 18P	1	
C6017	ECEA1CKA100	E. CAPACITOR 16V 10U	1	
C6018	ECUM1H102KBN	C. CAPACITOR CH 50V 1000P	1	
C6019	ECUM1H151JCN	C. CAPACITOR CH 50V 150P	1	
C6022	ECUM1H103ZFN	C. CAPACITOR CH 50V 0. 01U	1	
C7302	VCEA0JAW101	E. CAPACITOR 6. 3V 100U	1	
C7303	ECUX1H103ZFV	C. CAPACITOR CH 50V 0. 01U	1	
C7304	VCEA0JAW101	E. CAPACITOR 6. 3V 100U	1	
C7305, 06	ECUX1H330JCV	C. CAPACITOR CH 50V 33P	2	
C7307	ECUX1H103ZFV	C. CAPACITOR CH 50V 0. 01U	1	
C7308	ECEA1HKA2R2	E. CAPACITOR 50V 2. 2U	1	
C7311	ERJ3GEY0R00	M. RESISTOR CH 1/16W 0	1	
C7312, 13	ECUX1C104ZFV	C. CAPACITOR CH 16V 0. 1U	2	
C7315	ECUM1E104KBN	C. CAPACITOR CH 25V 0. 1U	1	
C7316	ECUX1C104ZFV	C. CAPACITOR CH 16V 0. 1U	1	
C7317	VCEA1CAW100	E. CAPACITOR 16V 10U	1	
C7318	VCEA0JAW470	E. CAPACITOR 6. 3V 47U	1	
C7319, 20	VCEA1CAW100	E. CAPACITOR 16V 10U	2	
C7324, 25	ECUX1C104ZFV	C. CAPACITOR CH 16V 0. 1U	2	
C7341, 42	ECUX1H472KBV	C. CAPACITOR CH 50V 4700P	2	
C7501	ECUM1H103ZFN	C. CAPACITOR CH 50V 0. 01U	1	
C7502	ECEA1HKA100	E. CAPACITOR 50V 10U	1	
C7503	ECUM1H120JCN	C. CAPACITOR CH 50V 12P	1	
C7504	ECEA0JKA101	E. CAPACITOR 6. 3V 100U	1	
C7505	ECUM1H104ZFN	C. CAPACITOR CH 50V 0. 1U	1	
C7506	VCE0073	SUPER CAPACITOR	1	
C7507	ECEA0JKA221	E. CAPACITOR 6. 3V 220U	1	
C7508	ECUM1H683ZFN	C. CAPACITOR CH 50V 0. 068U	1	
C7509	ECUM1H103ZFN	C. CAPACITOR CH 50V 0. 01U	1	
C7601	ECEA0JKA101	E. CAPACITOR 6. 3V 100U	1	

Ref. No.	Part No.	Part Name & Description	Pcs	Remarks
C7602	ECUM1H221JCN	C. CAPACITOR CH 50V 220P	1	
C7603	ECEA0JKA101	E. CAPACITOR 6. 3V 100U	1	
C7605, 06	ECUM1H330JCN	C. CAPACITOR CH 50V 33P	2	
C7607	ECEA0JKA101	E. CAPACITOR 6. 3V 100U	1	
C7608	ECUM1H103ZFN	C. CAPACITOR CH 50V 0. 01U	1	
C7610	ECEA1HKA100	E. CAPACITOR 50V 10U	1	
C7611	ECUM1H104ZFN	C. CAPACITOR CH 50V 0. 1U	1	
C7612	ECUM1H221JCN	C. CAPACITOR CH 50V 220P	1	
C7613	ERJ6GMZ0R00	M. RESISTOR CH 1/10W 0	1	
C7615	ECQV1H104JM	P. CAPACITOR 50V 0. 1U	1	
C7618	ECUM1E104KBN	C. CAPACITOR CH 25V 0. 1U	1	
C7619	ECUM1H104ZFN	C. CAPACITOR CH 50V 0. 1U	1	
C7620, 21	ECA1HAK2R2X	E. CAPACITOR 50V 2. 2U	2	[SUPPLIED FROM MBV]
C7623	ECUM1H330JCN	C. CAPACITOR CH 50V 33P	1	
C7701, 02	ECUM1H104ZFN	C. CAPACITOR CH 50V 0. 1U	2	
C7705	ECUM1H104ZFN	C. CAPACITOR CH 50V 0. 1U	1	
C7708	ECUM1H104ZFN	C. CAPACITOR CH 50V 0. 1U	1	
C7709	ECEA0JKA470	E. CAPACITOR 6. 3V 47U	1	
C7711	ECUM1C105ZFN	C. CAPACITOR CH 16V 1U	1	
C7712, 13	ECUM1H103ZFN	C. CAPACITOR CH 50V 0. 01U	2	
C7714	ECUM1H470JCN	C. CAPACITOR CH 50V 47P	1	
C7715	ECUM1C105ZFN	C. CAPACITOR CH 16V 1U	1	
C7716	ECUM1H471JCN	C. CAPACITOR CH 50V 470P	1	
C7717	ECUM1C105ZFN	C. CAPACITOR CH 16V 1U	1	
C7718	ECUM1H471JCN	C. CAPACITOR CH 50V 470P	1	
C7720	ECEA0JKA470	E. CAPACITOR 6. 3V 47U	1	
C7721	ECEA1EKA4R7	E. CAPACITOR 25V 4. 7U	1	
C7722, 23	ECUM1H104ZFN	C. CAPACITOR CH 50V 0. 1U	2	
C7728	ECEA1EKA4R7	E. CAPACITOR 25V 4. 7U	1	
C7729	ECUM1H104ZFN	C. CAPACITOR CH 50V 0. 1U	1	
C7730	ECEA0JKA101	E. CAPACITOR 6. 3V 100U	1	
C7731	ECUM1H820JCN	C. CAPACITOR CH 50V 82P	1	
C7735, 36	ECUM1H104ZFN	C. CAPACITOR CH 50V 0. 1U	2	
C7739	ECUM1H104ZFN	C. CAPACITOR CH 50V 0. 1U	1	
C7740	ECEA0JKA470	E. CAPACITOR 6. 3V 47U	1	
C7742	ECUM1H104ZFN	C. CAPACITOR CH 50V 0. 1U	1	
C7749, 50	ECUM1H270JCN	C. CAPACITOR CH 50V 27P	2	
C7752	ECEA0JKA470	E. CAPACITOR 6. 3V 47U	1	
C7802	ECEA0JKA470	E. CAPACITOR 6. 3V 47U	1	
C7803	ECUM1C105ZFN	C. CAPACITOR CH 16V 1U	1	
C7804	ECUM1H221JCN	C. CAPACITOR CH 50V 220P	1	
D0702	MA77	DIODE	1	
D1003	1SS254	DIODE	1	
D1004	MA4051N-H	DIODE	1	
D1006	MA4051N-L	DIODE	1	
D1009	MA4051N-M	DIODE	1	
D1010	1SS254	DIODE	1	
D1015, 16	1SS254	DIODE	2	
D1017	MA4120N-M	DIODE	1	[SUPPLIED FROM MBV]
D1018	1SS254	DIODE	1	
D1501	SIR505S	DIODE	1	
D2501, 02	1SS254	DIODE	2	
D3001	1SS254	DIODE	1	
D4905, 06	MA4075-M	DIODE	2	
D6002, 03	MA700	DIODE	2	
D7501	MA4220N-M	DIODE	1	[SUPPLIED FROM MBV]
D7503	RB441P	DIODE	1	
D7601	MA4300M	DIODE	1	
D7603, 04	1SS254	DIODE	2	
DP7501	VSL0533-B	FIP	1	[SUPPLIED FROM MBV]
FL7301	VLF0633	FILTER	1	
IC0701	LA75503	IC	1	[SUPPLIED FROM MBV]
IC1001	PQ20VB2E	IC	1	[SUPPLIED FROM MBV]
IC1201	UPC1093J	IC	1	[SUPPLIED FROM MBV]
IC1501, 02	RPI354N	IC	2	[SUPPLIED FROM MBV]
IC2502	AN3811NK	IC	1	[SUPPLIED FROM MBV]
IC3001	TDA9735HV3	IC	1	[SUPPLIED FROM MBV]
IC3501	AN3368SB	IC	1	[SUPPLIED FROM MBV]
IC4001	NJM4558M	IC	1	
IC4501	TDA9605H	IC	1	[SUPPLIED FROM MBV]
IC4901	LA73021M	IC	1	

Ref.No.	Part No.	Part Name & Description	Pcs	Remarks
IC6001	M3777AVCEZ	IC	1	[SUPPLIED FROM MBV]
IC7301	TDA9874AH	IC	1	[SUPPLIED FROM MBV]
IC7302	PST7043	IC	1	
IC7501	M35502AFP	IC	1	
IC7502	S80743AL	IC	1	
IC7503	PNA4611M02VT	IR RECEIVER UNIT	1	[SUPPLIED FROM MBV]
IC7504	RN5VD28AA	IC	1	[SUPPLIED FROM MBV]
IC7701	M3506SWVAX	IC	1	[SUPPLIED FROM MBV]
IC7703	M3062SVCEY	IC	1	[SUPPLIED FROM MBV]
IC7704	M24C16-WBN6	IC	1	[SUPPLIED FROM MBV]
⚠ IP1001, 02	UNH000300A	IC PROTECTOR	2	
⚠ IP1201, 02	UNH000300A	IC PROTECTOR	2	
JK4901	VJJ0377	RCA JACK	1	[SUPPLIED FROM MBV]
JK4903	VJS3634	21-PIN SCART JACK	1	[SUPPLIED FROM MBV]
K0703	ERJ3GEY0R00	M. RESISTOR CH 1/16W 0	1	
K0707	ERJ3GEY0R00	M. RESISTOR CH 1/16W 0	1	
K0709	ERJ3GEY0R00	M. RESISTOR CH 1/16W 0	1	
K2501	ERJ6GMZ0R00	M. RESISTOR CH 1/10W 0	1	
K2503	ERJ6GMZ0R00	M. RESISTOR CH 1/10W 0	1	
K3003	ERJ6GMZ0R00	M. RESISTOR CH 1/10W 0	1	
K7301-03	ERJ6GEY0R00	M. RESISTOR CH 1/10W 0	3	
K7603	ERJ6GMZ0R00	M. RESISTOR CH 1/10W 0	1	
L0701	ELJNAR18JF	CHIP INDUCTOR	1	[SUPPLIED FROM MBV]
L0703	ELJNA2R2JF	CHIP INDUCTOR	1	
L2503	VLQ0599J680	COIL 68UH	1	
L3001	VLQ0599J220	COIL 22UH	1	
L3003	VLQ0599J470	COIL 47UH	1	
L3004	VLQ0599J680	COIL 68UH	1	
L3005, 06	VLQ0599J101	COIL 100UH	2	
L3007	VLQ0599J330	COIL 33UH	1	
L3008	VLQ0599J470	COIL 47UH	1	
L3009	VLQ0599J390	COIL 39UH	1	
L3010	VLQ0599J560	COIL 56UH	1	
L3501	VLQ0599J330	COIL 33UH	1	
L4001	ELELN153JA	INDUCTOR 15000UH	1	[SUPPLIED FROM MBV]
L4007	VLQ0599J680	COIL 68UH	1	
L4501	VLQ0599J100	COIL 10UH	1	
L4901	VLQ0599JR22	COIL 0. 22UH	1	[SUPPLIED FROM MBV]
L4902-04	VLQ0599J680	COIL 68UH	3	
L6001	VLQ0599J101	COIL 100UH	1	
L6002	VLQ0599J2R2	COIL 2. 2UH	1	
L7302	VLQ0599J1R0	COIL 1UH	1	
L7601-04	VLQ0599J330	COIL 33UH	4	
L7605	VLQ0599J100	COIL 10UH	1	
L7608	VLQ0599J1R0	COIL 1UH	1	
L7609	VLQ0599J100	COIL 10UH	1	
L7701, 02	VLQ0599J390	COIL 39UH	2	
L7704	VLQ0599J390	COIL 39UH	1	
L7706	VLQ0599J100	COIL 10UH	1	
L7707	VLQ0599J220	COIL 22UH	1	
L7801	VLQ0599J680	COIL 68UH	1	
LB3001, 02	ERJ6GMZ0R00	M. RESISTOR CH 1/10W 0	2	
LB3501-04	VLP0145	COIL	4	
LB4901-04	ERJ6GMYJ221	M. RESISTOR CH 1/10W 220	4	
LB4906, 07	ERJ6GMYJ221	M. RESISTOR CH 1/10W 220	2	
LB7301	ERJ6GEY0R00	M. RESISTOR CH 1/10W 0	1	
LB7303	ERJ6GEY0R00	M. RESISTOR CH 1/10W 0	1	
P1001	VJS3917A016W	CONNECTOR (FEMALE) 16P	1	
P1501	VJS3837A002	CONNECTOR (FEMALE) 2P	1	
P2501	VJP3835A012	CONNECTOR (MALE) 12P	1	
P2502	VJS3537A009G	CONNECTOR (FEMALE) 9P	1	
P3502	VJS3537A010G	CONNECTOR (FEMALE) 10P	1	
P4002	VJS3837A002	CONNECTOR (FEMALE) 2P	1	
P4003	VJS3537A006G	CONNECTOR (FEMALE) 6P	1	
PK0701	VJR0826E009W	CONNECTOR (MALE) 9P	1	
PK7301	VJR0777B007W	CONNECTOR (MALE) 7P	1	
PK7302	VJR0777B006W	CONNECTOR (MALE) 6P	1	

Ref.No.	Part No.	Part Name & Description	Pcs	Remarks
PP0701	VJP3589A004B	CONNECTOR (MALE) 4P	1	
Q0702	2SD601A-S	TRANSISTOR	1	
Q1001	2SD601A	TRANSISTOR	1	
Q1002	2SD602A	TRANSISTOR	1	
Q1003	2SD1996-S	TRANSISTOR	1	
Q1004	2SB710A	TRANSISTOR	1	
Q1005, 06	2SD1996-S	TRANSISTOR	2	
Q1007	2SD602A-R	TRANSISTOR	1	
Q1009	2SD1996-S	TRANSISTOR	1	
Q1010	2SD601A	TRANSISTOR	1	
Q1201, 02	2SD1996-S	TRANSISTOR	2	
Q1501	PNB2301MBV	TRANSISTOR	1	
Q1502	PNB2301MAV	TRANSISTOR	1	
Q3003	2SB709A	TRANSISTOR	1	
Q4001	2SD1149	TRANSISTOR	1	
Q4002	2SD601A	TRANSISTOR	1	
Q4006	2SB710A-R	TRANSISTOR	1	
Q4007	2SD602A-R	TRANSISTOR	1	
Q4901	2SB709A	TRANSISTOR	1	
Q4903, 04	2SD601A	TRANSISTOR	2	
Q4905	2SD1328-S	TRANSISTOR	1	
Q7601	2SD601A	TRANSISTOR	1	
Q7604	2SD601A	TRANSISTOR	1	
Q7605	2SB709A	TRANSISTOR	1	
Q7606	2SD601A	TRANSISTOR	1	
Q7701	2SD601A	TRANSISTOR	1	
Q7702	2SB709A	TRANSISTOR	1	
Q7703	2SD601A	TRANSISTOR	1	
Q7709	2SB709A	TRANSISTOR	1	
Q7802	2SD601A	TRANSISTOR	1	
QR1001	MUN2112	TRANSISTOR-RESISTOR	1	
QR1002	MUN2211	TRANSISTOR-RESISTOR	1	
QR1003	MUN2212	TRANSISTOR-RESISTOR	1	
QR3006, 07	MUN2212	TRANSISTOR-RESISTOR	2	
QR4001	UN2217	TRANSISTOR-RESISTOR	1	
QR4002	MUN2113	TRANSISTOR-RESISTOR	1	
QR4004	MUN2212	TRANSISTOR-RESISTOR	1	
QR4006	MUN2111	TRANSISTOR-RESISTOR	1	
QR4502-05	UN2215	TRANSISTOR	4	
QR4506	MUN2113	TRANSISTOR-RESISTOR	1	
QR4903	MUN2212	TRANSISTOR-RESISTOR	1	
QR6002	MUN2211	TRANSISTOR-RESISTOR	1	
QR6003, 04	MUN2212	TRANSISTOR-RESISTOR	2	
QR6005	MUN2211	TRANSISTOR-RESISTOR	1	
QR6006	MUN2213	TRANSISTOR-RESISTOR	1	
QR6007	MUN2113	TRANSISTOR-RESISTOR	1	
R0705	ERJ3GEYJ362	M. RESISTOR CH 1/16W 3. 6K	1	
R0707	ERJ3GEYJ393	M. RESISTOR CH 1/16W 39K	1	
R0708	ERJ3GEYJ103	M. RESISTOR CH 1/16W 10K	1	
R0711	ERJ3GEYJ181	M. RESISTOR CH 1/16W 180	1	
R0713	ERJ3GEY0R00	M. RESISTOR CH 1/16W 0	1	
R0715	ERJ3GEYJ223	M. RESISTOR CH 1/16W 22K	1	
R0717	ERJ3GEYJ471	M. RESISTOR CH 1/16W 470	1	
R0719	ERJ3GEYJ472	M. RESISTOR CH 1/16W 4. 7K	1	
R0725	ERJ6GEYJ101	M. RESISTOR CH 1/10W 100	1	
R0726	ERJ3GEYJ683	M. RESISTOR CH 1/16W 68K	1	
R0727	ERJ3GEY0R00	M. RESISTOR CH 1/16W 0	1	
R0729	ERJ3GEYJ103	M. RESISTOR CH 1/16W 10K	1	
R0730	ERJ6GEYG103	M. RESISTOR CH 1/10W 10K	1	
R0740	ERJ3GEYG271	M. RESISTOR CH 1/16W 270	1	[SUPPLIED FROM MBV]
R0741	ERJ3GEYJ221	M. RESISTOR CH 1/16W 220	1	
R0742	ERJ8GEYJ151	M. RESISTOR CH 1/8W 150	1	
R0745	ERJ6GEYJ335	M. RESISTOR CH 1/10W 3. 3M	1	
R1001, 02	ERJ6GMYJ333	M. RESISTOR CH 1/10W 33K	2	
R1003, 04	ERJ6GMYJ562	M. RESISTOR CH 1/10W 5. 6K	2	
R1005	ERDS2TJ182	C. RESISTOR 1/4W 1. 8K	1	
R1006	ERJ6GMYJ472	M. RESISTOR CH 1/10W 4. 7K	1	
R1008	ERDS2TJ682	C. RESISTOR 1/4W 6. 8K	1	
R1009, 10	ERJ6GMYJ103	M. RESISTOR CH 1/10W 10K	2	
R1011	ERJ6GMYG823	M. RESISTOR CH 1/10W 82K	1	
R1012	ERDS2TJ272	C. RESISTOR 1/4W 2. 7K	1	
R1013	ERJ6GMYG153	M. RESISTOR CH 1/10W 15K	1	

Ref. No.	Part No.	Part Name & Description	Pcs	Remarks
R1014	ERJ6GMYG163	M. RESISTOR CH 1/10W 16K	1	
R1015	ERJ6GMYG123	M. RESISTOR CH 1/10W 12K	1	
R1016, 17	ERJ6GMYJ563	M. RESISTOR CH 1/10W 56K	2	
R1018, 19	ERJ6GMYJ683	M. RESISTOR CH 1/10W 68K	2	
R1022	ERJ6GMYJ103	M. RESISTOR CH 1/10W 10K	1	
R1023	ERJ6GMYJ123	M. RESISTOR CH 1/10W 12K	1	
R1024	ERJ6GMYJ103	M. RESISTOR CH 1/10W 10K	1	
R1026	ERJ6GMYJ152	M. RESISTOR CH 1/10W 1.5K	1	
R1027	ERDS2TJ123	C. RESISTOR 1/4W 12K	1	
R1028	ERJ6GMYJ102	M. RESISTOR CH 1/10W 1K	1	
R1029	ERJ6GMYG562	M. RESISTOR CH 1/10W 5.6K	1	
R1030	ERJ6GMYG622	M. RESISTOR CH 1/10W 6.2K	1	
R1201, 02	ERJ6GMYG272	M. RESISTOR CH 1/10W 2.7K	2	
R1203	ERJ6GMYJ623	M. RESISTOR CH 1/10W 6.2K	1	
R1204	ERDS2TJ102	C. RESISTOR 1/4W 1K	1	
R1501	ERJ6GMYJ101	M. RESISTOR CH 1/10W 100	1	
R1502	ERJ6GMYJ273	M. RESISTOR CH 1/10W 27K	1	
R1503	ERDS2TJ181	C. RESISTOR 1/4W 180	1	
R1504	ERJ6GMYJ273	M. RESISTOR CH 1/10W 27K	1	
R1505	ERDS2TJ121	C. RESISTOR 1/4W 120	1	
R2501	ERDS2TJ331	C. RESISTOR 1/4W 330	1	
R2502	ERJ6GMYG433	M. RESISTOR CH 1/10W 43K	1	
R2503	ERDS2TJ330	C. RESISTOR 1/4W 33	1	
R2504	ERJ6GMZ0R00	M. RESISTOR CH 1/10W 0	1	
R2505	ERJ6GMYJ103	M. RESISTOR CH 1/10W 10K	1	
R2506	ERJ6GMYJ102	M. RESISTOR CH 1/10W 1K	1	
R2507	ERJ6GMYJ392	M. RESISTOR CH 1/10W 3.9K	1	
R2508	ERDS2TJ330	C. RESISTOR 1/4W 33	1	
R2509	ERJ6GMYJ102	M. RESISTOR CH 1/10W 1K	1	
R2510	ERJ6GMYJ105	M. RESISTOR CH 1/10W 1M	1	
R2513	ERJ6GMYJ274	M. RESISTOR CH 1/10W 270	1	
R2514	ERJ6GMYJ103	M. RESISTOR CH 1/10W 10K	1	
R2517	ERDS1TJ1R2	C. RESISTOR 1/2W 1.2	1	
R2518	ERDS1TJ1R5	C. RESISTOR 1/2W 1.5	1	
R2519	ERDS2TJ330	C. RESISTOR 1/4W 33	1	
R3001	ERJ6GMYJ183	M. RESISTOR CH 1/10W 18K	1	
R3002	ERJ6GMYG301	M. RESISTOR CH 1/10W 300	1	
R3004	ERJ6GMYJ472	M. RESISTOR CH 1/10W 4.7K	1	
R3005	ERJ6GMZ0R00	M. RESISTOR CH 1/10W 0	1	
R3007	ERJ6GMZ0R00	M. RESISTOR CH 1/10W 0	1	
R3008	ERJ6GMYJ152	M. RESISTOR CH 1/10W 1.5K	1	
R3009	ERJ6GMYJ101	M. RESISTOR CH 1/10W 100	1	
R3010	ERJ6GMYJ473	M. RESISTOR CH 1/10W 47K	1	
R3011, 12	ERJ6GMYJ101	M. RESISTOR CH 1/10W 100	2	
R3020	ERJ6GMZ0R00	M. RESISTOR CH 1/10W 0	1	
R3021	ERJ6GMYJ684	M. RESISTOR CH 1/10W 680K	1	
R3022	ERJ6GMYJ224	M. RESISTOR CH 1/10W 220K	1	
R3023	ERJ6GMYJ332	M. RESISTOR CH 1/10W 3.3K	1	
R3024	ERJ6GMYG271	M. RESISTOR CH 1/10W 270	1	
R3025	ERJ6GMYG102	M. RESISTOR CH 1/10W 1K	1	
R3026	ERJ6GMYG152	M. RESISTOR CH 1/10W 1.5K	1	
R3027	ERJ6GMYJ562	M. RESISTOR CH 1/10W 5.6K	1	
R3028	ERJ6GMYG152	M. RESISTOR CH 1/10W 1.5K	1	
R3029	ERJ6GMYG331	M. RESISTOR CH 1/10W 330	1	
R3030	ERJ6GMYJ123	M. RESISTOR CH 1/10W 12K	1	
R3031	ERJ6GMYJ225	M. RESISTOR CH 1/10W 2.2M	1	
R3032	ERJ6GMYG391	M. RESISTOR CH 1/10W 390	1	
R3033	ERJ6GMYG471	M. RESISTOR CH 1/10W 470	1	
R3034	ERJ6GMYG561	M. RESISTOR CH 1/10W 560	1	
R3035	ERJ6GMYG271	M. RESISTOR CH 1/10W 270	1	
R3036	ERJ6GMYJ272	M. RESISTOR CH 1/10W 2.7K	1	
R3040	ERJ6GMZ0R00	M. RESISTOR CH 1/10W 0	1	
R3505	ERJ6GMYJ101	M. RESISTOR CH 1/10W 100	1	
R4001	ERJ6GMYG334	M. RESISTOR CH 1/10W 330K	1	
R4002	ERJ6GMYG103	M. RESISTOR CH 1/10W 10K	1	
R4003	ERJ6GMYJ753	M. RESISTOR CH 1/10W 75K	1	
R4004	ERJ6GMYJ153	M. RESISTOR CH 1/10W 15K	1	
R4005	ERJ6GMYG241	M. RESISTOR CH 1/10W 240	1	
R4006	ERJ6GMYJ223	M. RESISTOR CH 1/10W 22K	1	
R4007	ERJ6GMYJ472	M. RESISTOR CH 1/10W 4.7K	1	
R4008	ERJ6GMYJ222	M. RESISTOR CH 1/10W 2.2K	1	
R4009	ERJ6GMYJ181	M. RESISTOR CH 1/10W 180	1	
R4010	ERJ6GMYJ391	M. RESISTOR CH 1/10W 390	1	
R4011	ERJ6GMYJ392	M. RESISTOR CH 1/10W 3.9K	1	
R4012	ERJ6GMZ0R00	M. RESISTOR CH 1/10W 0	1	

Ref. No.	Part No.	Part Name & Description	Pcs	Remarks
R4014	ERJ6GMYK225	M. RESISTOR CH 1/10W 2.2M	1	
R4015	ERJ6GMYJ272	M. RESISTOR CH 1/10W 2.7K	1	
R4016	ERJ6GMYJ182	M. RESISTOR CH 1/10W 1.8K	1	
R4019	ERJ6GMYJ101	M. RESISTOR CH 1/10W 100	1	
R4036	ERJ6GMYJ682	M. RESISTOR CH 1/10W 6.8K	1	
R4037	ERJ6GMYJ222	M. RESISTOR CH 1/10W 2.2K	1	
R4038, 39	ERJ6GMYJ154	M. RESISTOR CH 1/10W 150K	2	
R4049	ERJ6GMYJ473	M. RESISTOR CH 1/10W 47K	1	
R4060	ERJ6GMYJ822	M. RESISTOR CH 1/10W 8.2K	1	
R4061	ERJ6GMYJ332	M. RESISTOR CH 1/10W 3.3K	1	
R4062	ERJ6GMYJ272	M. RESISTOR CH 1/10W 2.7K	1	
R4063	ERJ6GMYJ332	M. RESISTOR CH 1/10W 3.3K	1	
R4067	ERJ6GMYJ682	M. RESISTOR CH 1/10W 6.8K	1	
R4068	ERJ6GMYJ222	M. RESISTOR CH 1/10W 2.2K	1	
R4069, 70	ERJ6GMYJ154	M. RESISTOR CH 1/10W 150K	2	
R4071	ERJ6GMYJ103	M. RESISTOR CH 1/10W 10K	1	
R4072	ERJ6GMYJ224	M. RESISTOR CH 1/10W 220K	1	
R4073	ERJ6GMYJ472	M. RESISTOR CH 1/10W 4.7K	1	
R4503-06	ERJ6GMYJ753	M. RESISTOR CH 1/10W 75K	4	
R4509	ERJ6GMYK335	M. RESISTOR CH 1/10W 3.3M	1	
R4510	ERJ6GMYJ221	M. RESISTOR CH 1/10W 220	1	
R4512	ERJ6GMYJ221	M. RESISTOR CH 1/10W 220	1	
R4514	ERJ6GMYJ221	M. RESISTOR CH 1/10W 220	1	
R4516, 17	ERJ6GMYJ104	M. RESISTOR CH 1/10W 100K	2	
R4518, 19	ERJ6GMYJ221	M. RESISTOR CH 1/10W 220	2	
R4520	ERJ6GMYJ223	M. RESISTOR CH 1/10W 22K	1	
R4521	ERJ6GMYJ393	M. RESISTOR CH 1/10W 39K	1	
R4522	ERJ6GMYJ332	M. RESISTOR CH 1/10W 3.3K	1	
R4523	ERJ6RBD393	M. RESISTOR CH 1/10W 39K	1	[SUPPLIED FROM MBV]
R4524	ERJ6GMYJ332	M. RESISTOR CH 1/10W 3.3K	1	
R4525	ERJ6GMYJ393	M. RESISTOR CH 1/10W 39K	1	
R4526	ERJ6GMYJ221	M. RESISTOR CH 1/10W 220	1	
R4527	ERJ6GMYJ103	M. RESISTOR CH 1/10W 10K	1	
R4528	ERJ6GMYJ102	M. RESISTOR CH 1/10W 1K	1	
R4529, 30	ERJ6GMYJ391	M. RESISTOR CH 1/10W 390	2	
R4539	ERJ6GMYJ223	M. RESISTOR CH 1/10W 22K	1	
R4901, 02	ERJ6GMYJ331	M. RESISTOR CH 1/10W 330	2	
R4905	ERDS2TJ471	C. RESISTOR 1/4W 470	1	
R4907, 08	ERJ6GMYJ221	M. RESISTOR CH 1/10W 220	2	
R4911	ERJ6GMYJ221	M. RESISTOR CH 1/10W 220	1	
R4912	ERJ6GMYJ472	M. RESISTOR CH 1/10W 4.7K	1	
R4913	ERJ6GMYJ153	M. RESISTOR CH 1/10W 15K	1	
R4915	ERJ6GMYJ223	M. RESISTOR CH 1/10W 22K	1	
R4916	ERJ6GMYJ471	M. RESISTOR CH 1/10W 470	1	
R4921	ERJ6GMYJ331	M. RESISTOR CH 1/10W 330	1	
R4923	ERJ6GMYJ331	M. RESISTOR CH 1/10W 330	1	
R4924, 25	ERJ6GMYJ750	M. RESISTOR CH 1/10W 75	2	
R4926, 27	ERJ6GMYJ473	M. RESISTOR CH 1/10W 47K	2	
R4928, 29	ERJ6GMYJ750	M. RESISTOR CH 1/10W 75	2	
R4931	ERJ6GMYJ103	M. RESISTOR CH 1/10W 10K	1	
R4933	ERJ6GMYJ911	M. RESISTOR CH 1/10W 910	1	
R4934	ERJ6GMYJ102	M. RESISTOR CH 1/10W 1K	1	
R6001	ERJ6GMYJ562	M. RESISTOR CH 1/10W 5.6K	1	
R6002, 03	ERJ6GMYJ102	M. RESISTOR CH 1/10W 1K	2	
R6005	ERJ6GMYJ103	M. RESISTOR CH 1/10W 10K	1	
R6006	ERJ6GMYJ102	M. RESISTOR CH 1/10W 1K	1	
R6007	ERJ6GMYJ273	M. RESISTOR CH 1/10W 27K	1	
R6008	ERJ6GMYJ224	M. RESISTOR CH 1/10W 220K	1	
R6010	ERJ6GMYJ153	M. RESISTOR CH 1/10W 15K	1	
R6011	ERJ6GMYJ103	M. RESISTOR CH 1/10W 10K	1	
R6012, 13	ERJ6GMYJ472	M. RESISTOR CH 1/10W 4.7K	2	
R6014	ERJ6GMZ0R00	M. RESISTOR CH 1/10W 0	1	
R6015	ERJ6GMYJ103	M. RESISTOR CH 1/10W 10K	1	
R6016	ERJ6GMYJ153	M. RESISTOR CH 1/10W 15K	1	
R6017	ERJ6GMYJ682	M. RESISTOR CH 1/10W 6.8K	1	
R6018	ERDS2TJ221	C. RESISTOR 1/4W 220	1	
R6020	ERJ6GMYJ102	M. RESISTOR CH 1/10W 1K	1	
R6022	ERJ6GMYJ102	M. RESISTOR CH 1/10W 1K	1	
R6023-30	ERJ6GMYJ221	M. RESISTOR CH 1/10W 220	8	
R6031	ERJ6GMYJ273	M. RESISTOR CH 1/10W 27K	1	
R6032	ERJ6GMYJ393	M. RESISTOR CH 1/10W 39K	1	
R6033	ERJ6GMYJ273	M. RESISTOR CH 1/10W 27K	1	
R6036	ERJ6GMYJ101	M. RESISTOR CH 1/10W 100	1	
R6038	ERJ6GMYJ433	M. RESISTOR CH 1/10W 43K	1	
R6039	ERJ6GMYJ393	M. RESISTOR CH 1/10W 39K	1	

Ref.No.	Part No.	Part Name & Description	Pcs	Remarks
R7302	ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	1	
R7305,06	ERJ6GEYJ101	M.RESISTOR CH 1/10W 100	2	
R7316	ERJ3GEYJ103	M.RESISTOR CH 1/16W 10K	1	
R7324	ERJ3GEYJ221	M.RESISTOR CH 1/16W 220	1	
R7325	ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	1	
R7327	ERJ3GEYJ822	M.RESISTOR CH 1/16W 8.2K	1	
R7328,29	ERJ3GEYJ221	M.RESISTOR CH 1/16W 220	2	
R7501	ERDS2TJ150	C.RESISTOR 1/4W 15	1	
R7502	ERJ6GMYJ101	M.RESISTOR CH 1/10W 100	1	
R7503,04	ERJ6GMYJ202	M.RESISTOR CH 1/10W 2K	2	
R7505	ERJ6GMZ0R00	M.RESISTOR CH 1/10W 0	1	
R7506-08	ERJ6GMYJ332	M.RESISTOR CH 1/10W 3.3K	3	
R7509	ERJ6GMYJ822	M.RESISTOR CH 1/10W 8.2K	1	
R7510	ERJ6GMYJ562	M.RESISTOR CH 1/10W 5.6K	1	
R7511	ERJ6GMYJ432	M.RESISTOR CH 1/10W 4.3K	1	
R7512,13	ERJ6GMYJ103	M.RESISTOR CH 1/10W 10K	2	
R7514	ERJ6GMYJ822	M.RESISTOR CH 1/10W 8.2K	1	
R7515	ERJ6GMYJ562	M.RESISTOR CH 1/10W 5.6K	1	
R7516	ERJ6GMYJ432	M.RESISTOR CH 1/10W 4.3K	1	
R7517	ERJ6GMYJ103	M.RESISTOR CH 1/10W 10K	1	
R7520,21	ERJ6GMYJ223	M.RESISTOR CH 1/10W 22K	2	
R7522	ERJ6GMYJ181	M.RESISTOR CH 1/10W 180	1	
R7523-26	ERJ6GMYJ303	M.RESISTOR CH 1/10W 30K	4	
R7538	ERJ6GMYJ432	M.RESISTOR CH 1/10W 4.3K	1	
R7549	ERDS2TJ150	C.RESISTOR 1/4W 15	1	
R7601,02	ERJ6GMYJ101	M.RESISTOR CH 1/10W 100	2	
R7603	ERJ6GMYJ102	M.RESISTOR CH 1/10W 1K	1	
R7606,07	ERJ6GMYJ101	M.RESISTOR CH 1/10W 100	2	
R7608,09	ERDS2TJ331	C.RESISTOR 1/4W 330	2	
R7610	ERJ6GMYJ151	M.RESISTOR CH 1/10W 150	1	
R7612	ERJ6GMZ0R00	M.RESISTOR CH 1/10W 0	1	
R7613	ERJ6GMYJ151	M.RESISTOR CH 1/10W 150	1	
R7614	ERJ6GMYJ561	M.RESISTOR CH 1/10W 560	1	
R7615	ERJ6GMYJ103	M.RESISTOR CH 1/10W 10K	1	
R7620	ERJ6GMYJ104	M.RESISTOR CH 1/10W 100K	1	
R7621	ERJ6GMYJ182	M.RESISTOR CH 1/10W 1.8K	1	
R7622,23	ERJ6GMYJ154	M.RESISTOR CH 1/10W 150K	2	
R7704	ERJ6GMYJ472	M.RESISTOR CH 1/10W 4.7K	1	
R7705	ERJ6GMYJ473	M.RESISTOR CH 1/10W 47K	1	
R7707	ERJ6GMYJ471	M.RESISTOR CH 1/10W 470	1	
R7708-10	ERJ6GMYJ511	M.RESISTOR CH 1/10W 510	3	
R7711	ERJ6GMYJ104	M.RESISTOR CH 1/10W 100K	1	
R7712	ERJ6GMYJ102	M.RESISTOR CH 1/10W 1K	1	
R7713	ERJ6GMYJ104	M.RESISTOR CH 1/10W 100K	1	
R7714	ERJ6GMYG153	M.RESISTOR CH 1/10W 15K	1	
R7715	ERJ6GMYG152	M.RESISTOR CH 1/10W 1.5K	1	
R7716	ERJ6GMYG562	M.RESISTOR CH 1/10W 5.6K	1	
R7729	ERJ6GMYJ102	M.RESISTOR CH 1/10W 1K	1	
R7730	ERJ6GMYJ332	M.RESISTOR CH 1/10W 3.3K	1	
R7740	ERJ6GMYJ472	M.RESISTOR CH 1/10W 4.7K	1	
R7741-44	ERJ6GMYJ101	M.RESISTOR CH 1/10W 100	4	
R7746	ERJ6GMYJ101	M.RESISTOR CH 1/10W 100	1	
R7751,52	ERJ6GMYJ101	M.RESISTOR CH 1/10W 100	2	
R7753	ERJ6GMYJ272	M.RESISTOR CH 1/10W 2.7K	1	
R7754-57	ERJ6GMYJ101	M.RESISTOR CH 1/10W 100	4	
R7759	ERJ6GMYJ222	M.RESISTOR CH 1/10W 2.2K	1	
R7760	ERJ6GMZ0R00	M.RESISTOR CH 1/10W 0	1	
R7761	ERJ6GMYJ472	M.RESISTOR CH 1/10W 4.7K	1	
R7765-67	ERJ6GMYJ101	M.RESISTOR CH 1/10W 100	3	
R7768	ERJ6GMYJ472	M.RESISTOR CH 1/10W 4.7K	1	
R7769	ERJ6GMYJ101	M.RESISTOR CH 1/10W 100	1	
R7770	ERJ6GMYJ472	M.RESISTOR CH 1/10W 4.7K	1	
R7771-78	ERJ6GMYJ101	M.RESISTOR CH 1/10W 100	8	
R7784,85	ERJ6GMYJ472	M.RESISTOR CH 1/10W 4.7K	2	
R7792-99	ERJ6GMYJ101	M.RESISTOR CH 1/10W 100	8	
R7802,03	ERJ6GMZ0R00	M.RESISTOR CH 1/10W 0	2	
R7804,05	ERJ6GMYJ102	M.RESISTOR CH 1/10W 1K	2	
R7807	ERJ6GMYJ102	M.RESISTOR CH 1/10W 1K	1	
R7808	ERJ6GMYJ473	M.RESISTOR CH 1/10W 47K	1	
R7809	ERJ6GMYJ472	M.RESISTOR CH 1/10W 4.7K	1	
S1501	VSS0520-3	MODE SELECT SWITCH	1	[SUPPLIED FROM MBV]
S7501	VES0834	S-TAB SWITCH	1	
S7502-06	EVQ11L07B	SWITCH	5	

Ref.No.	Part No.	Part Name & Description	Pcs	Remarks
T0701	EQV5EC082P	TRANSFORMER	1	[SUPPLIED FROM MBV]
T4001	EQQ7QF024P	TRANSFORMER	1	
⚠ TU7601	ENG47306G1	TUNER	1	[SUPPLIED FROM MBV]
VR0701	EVNCBAA00B14	V.RESISTOR	1	
X0701	VLF1416	FILTER	1	[SUPPLIED FROM MBV]
X0704	VLF1493	FILTER	1	[SUPPLIED FROM MBV]
X3001	VSX0162	CRYSTAL OSCILLATOR	1	
X6001	VSX0830	CRYSTAL OSCILLATOR	1	
X6002	VSX0660	CRYSTAL OSCILLATOR	1	
X7302	VSX0953	CRYSTAL OSCILLATOR	1	
X7701	VSX1043	CRYSTAL OSCILLATOR	1	
		MISCELLANEOUS		
	VSC4999	SHIELD CASE (MIDDLE)	1	[SUPPLIED FROM MBV]
	VSC4998	HA ANGLE	1	[SUPPLIED FROM MBV]
	VXQ0648	FIP HOLDER	1	
	VSC4752	SHIELD CASE (MAIN)	1	FOR NICAM DECODER C.B.A.
	VMP4471	TV DEMODULATOR ANGLE	1	FOR TV DEMODULATOR C.B.A.
⚠ ■	VEP01826T	POWER C.B.A.		[SUPPLIED FROM MBV]
				(RTL)
⚠ C1101	VCK0286E102	CERAMIC CAPACITOR	1	
C1102	ECQV1H104JM	P.CAPACITOR 50V 0.1U	1	
⚠ C1103,04	VCK0286E102	CERAMIC CAPACITOR	2	
C1106	ECQE6104KF	P.CAPACITOR 630V 0.1U	1	
C1108	ECCD3A470KGE	C.CAPACITOR 1KV 47P	1	
C1109	ECKD2H103PU	C.CAPACITOR 500V 0.01U	1	
C1110	ECEA0JGE331	E.CAPACITOR 6.3V 330U	1	
C1111	ECKF1H102KB	C.CAPACITOR 50V 1000P	1	
C1112	ECQB1H822JF	P.CAPACITOR 50V 8200P	1	
C1114	ECA1VGE470X	E.CAPACITOR 35V 47U	1	
C1116	ECKD2H101KB	C.CAPACITOR 500V 100P	1	
⚠ C1118,19	ECQU2A104MVA	P.CAPACITOR 250V 0.1U	2	
C1120	ECEC2GG330	E.CAPACITOR 400V 33U	1	
C1131	EEUFA1E681	E.CAPASITOR 25V 680U	1	
C1132	EEUFA1E331L	E.CAPASITOR 25V 330U	1	[SUPPLIED FROM MBV]
C1133	ECKD2H221KB	C.CAPACITOR 500V 220P	1	
C1134	EEUFA1A222E	E.CAPACITOR 10V 2200U	1	
C1135	ECEA1AGE331	E.CAPACITOR 10V 330U	1	
C1136	ECKD2H221KB	C.CAPACITOR 500V 220P	1	
C1137	ECEA1HGE470	E.CAPACITOR 50V 47U	1	
C1138	ECKF1H103ZF	C.CAPACITOR 50V 0.01U	1	
C1139	ECKD2H101KB	C.CAPACITOR 500V 100P	1	
C1140	ECEA1HGE101	E.CAPACITOR 50V 100U	1	
C1141	ECKF1H103ZF	C.CAPACITOR 50V 0.01U	1	
C1142	ECKD2H221KB	C.CAPACITOR 500V 220P	1	
C1143	ECEA1AFZ331	E.CAPACITOR 10V 330U	1	
C1144,45	ECQB1H103JF	P.CAPACITOR 50V 0.01U	2	
D1102	S1WBA80	DIODE	1	
⚠ D1103	AP01C	DIODE	1	
D1104	MA185	DIODE	1	
D1105	MA700	DIODE	1	
D1106	MA4220-H	DIODE	1	
D1107	1SS254	DIODE	1	
⚠ D1109,10	ERA15-08	DIODE	2	
D1114	RK36	DIODE	1	
D1118	RD100E	ZENER DIODE	1	[SUPPLIED FROM MBV]
D1121	RL2ZP	DIODE	1	
D1123,24	ERA22-04	DIODE	2	
D1125	11EQS06	DIODE	1	
D1130	MA7300B	DIODE	1	
⚠ F1101	XBA2C16TH15	FUSE	1	[SUPPLIED FROM MBV]
⚠ IC1101	STRM6559LF	IC	1	[SUPPLIED FROM MBV]
IC1102	UPC1093J	IC	1	[SUPPLIED FROM MBV]
⚠ IP1101	VSF0015A10	FUSE	1	[SUPPLIED FROM MBV]

Ref. No.	Part No.	Part Name & Description	Pcs	Remarks
⚠ L1107	ELF15N005A	LINE FILTER	1	
⚠ L1108	ELF17N004A	LINE FILTER	1	
L1121, 22	VLQ0655K220	COIL 22UH	2	
L1123, 24	ELESE101KA	COIL 100UH	2	
LB1105	VLP0056	FERRITE BEAD	1	
⚠ P1101	VJS3306	AC INLET	1	[SUPPLIED FROM MBV]
P1103	VJP3917A016G	CONNECTOR (MALE) 16P	1	
⚠ Q1111	CNX82A5387	PHOTO COUPLER	1	[SUPPLIED FROM MBV]
R1101	ERDS2TJ561	C. RESISTOR 1/4W 560	1	
R1102	ERG1SJ393	M. RESISTOR 1W 39K	1	
R1105	ERDS1TJ395	C. RESISTOR 1/2W 3. 9M	1	
R1106	ERDS1TJ475	C. RESISTOR 1/2W 4. 7M	1	
R1107	ERDS2FJ154	C. RESISTOR 1/4W 150K	1	[SUPPLIED FROM MBV]
R1108	ERDS2FJ101	C. RESISTOR 1/4W 100	1	
R1109	ERDS2FJ152	C. RESISTOR 1/4W 1. 5K	1	
R1110	ERDS2FJ103	C. RESISTOR 1/4W 10K	1	
R1111	ERDS2FJ151	C. RESISTOR 1/4W 150	1	[SUPPLIED FROM MBV]
R1112	ERDS2FJ221	C. RESISTOR 1/4W 220	1	
R1113	ERX1SJ1R0	M. RESISTOR 1W 1	1	
R1114	ERDS2FJ332	C. RESISTOR 1/4W 3. 3K	1	
R1115	ERDS2FJ330	C. RESISTOR 1/4W 33	1	[SUPPLIED FROM MBV]
R1116	ERDS2TJ272	C. RESISTOR 1/4W 2. 7K	1	
R1119	ERDS2TJ103	C. RESISTOR 1/4W 10K	1	
R1120	EROS2CKG2401	M. RESISTOR 1/4W 2. 4K	1	
R1121	EROS2CKG2701	M. RESISTOR 1/4W 2. 7K	1	
⚠ R1122	ERC12AGM334	S. RESISTOR 1/2W 330K	1	
R1125	ERDS2TJ271	C. RESISTOR 1/4W 270	1	
S7511-15	EVQ11L07B	SWITCH	5	
⚠ T1101	ETE28K127AZ	SWITCHING TRANSFORMER	1	[SUPPLIED FROM MBV]
		MISCELLANEOUS		
	VMP5133	INLET ANGLE	1	
	VHD0418	SCREW	1	
	TP00351-51	FUSE HOLDER	2	
■	VEP000F8A	CYLINDER STATOR C. B. A.		
		MISCELLANEOUS		
	HW-300A-DF	HALL IC	1	[SUPPLIED FROM MBV]
	VJS3537B009G	CONNECTOR (FEMALE) 9P	1	

Ref. No.	Part No.	Part Name & Description	Pcs	Remarks

INTERNAL REFERENCE CODE

NOTE: This chart is only for internal reference.
Do not order any parts accoding to these codes.

P.C.B.	FILM CODE
MAIN	FUMF00-06D25
POWER	FUMF02-01826
TV DEMODU	FUMF00-07A23
DECODER	FUMF00-07A16
NICAM DECODER	FUMF00-07A18
CYLINDER DRIVE	FUMF01-000F8

ORDER NO. VRD9802005C2

Service Manual

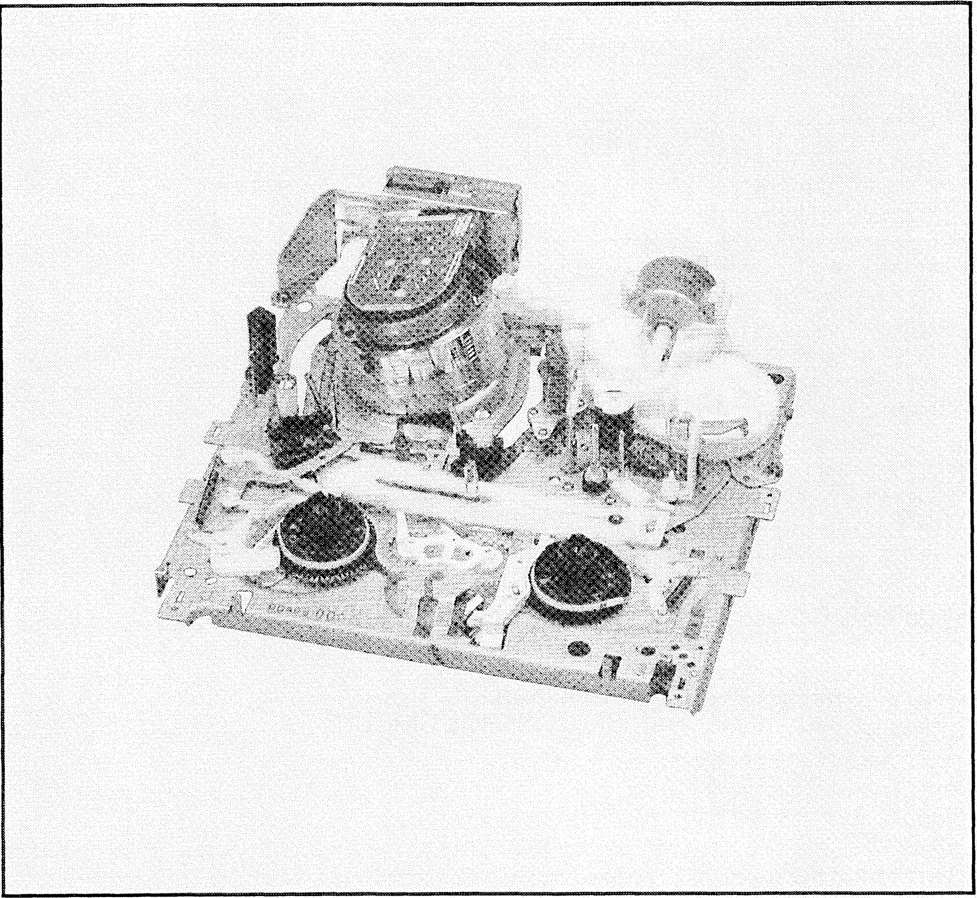
Video Cassette Recorder

Panasonic VHS

V20682

Z-MECHANISM CHASSIS

REV-1



INTRODUCTION

The Z-Mechanism chassis are built in several Panasonic VHS Video Cassette Recorders from NV-SD and NV-HD series in 1998.

⚠ WARNING

This service information is designed for experienced repair technicians only and is not designed for use by the general public. It does not contain warnings or cautions to advise non-technical individuals of potential dangers in attempting to service a product.
Products powered by electricity should be serviced or repaired only by experienced professional technicians. Any attempt to service or repair the product or products dealt with in this service information by anyone else could result in serious injury or death.

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Panasonic

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1. OUTLINE OF Z MECHANISM

1-1. The tape transport path

(1) Mechanism Chassis

Aluminium Chassis has been changed to sheet metal (Thickness: 1.2 mm).

(2) Capstan position (Cassette-in method/Capstan-in method)

The Tape does not touch the Cassette tape so that the rationalization has been promoted such as Reel gear pinch up/down mechanism has been deleted.

(3) Deletion of P1 post

FE Head has been installed Limiter so that P1 post has been deleted.

(4) A/C Head base combined with P4 post

A/C Head has been combined with P4 post on the same base.

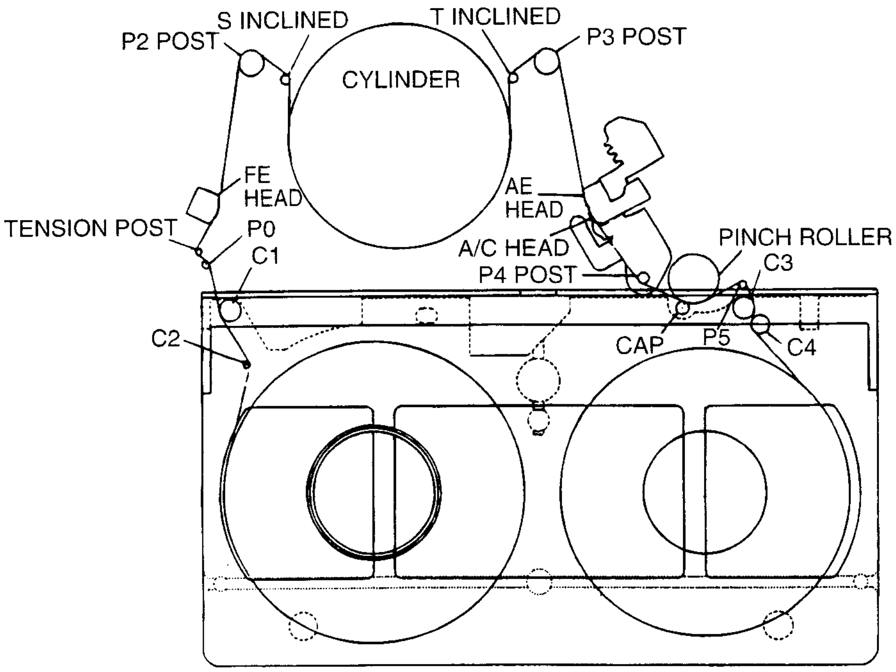
(5) Change of A/C head base type

The change of the angle winding the tape on A/C head has been reduced by the construction of A/C head base has been changed from the revolution type to slide base type.

(6) Improvement of P5 post

P5 post operation has been changed by non-adjustable of the Height and the Tilt adjustment so that the specification has been improved.

Z Mechanism tape transport path in REV mode


S INCLINED
T INCLINED
P2 POST
P3 POST
CYLINDER
FE HEAD
AE HEAD
TENSION POST
P0
C1
A/C HEAD
P4 POST
PINCH ROLLER
C3
C2
CAP
P5
C4

1-2. Cassette holder unit

(1) Cassette-in operation

The Rack drive arm drives Main Cam gear by inserting the cassette tape. Consequently, Position switch detects the cassette-in mode so that Loading motor drives. The mode goes to the Stop mode from the Cassette-in through the Loading mode.

① The parts quantity reduction of Cassette holder unit.
(Z Mechanism: 21 pieces, K Mechanism: 36 pieces)

a. Release lever has been installed in Right Side Plate.
b. Cassette guide has been installed in Front Panel unit.
c. Safety lever spring is made by the resin.
d. Opener lever has been changed into the single opener type.
e. One side of Side Plate unit is hung on Chassis in order to fix it.

② Improvement of the cassette insertion
(The force of the cassette insertion Z Mechanism: Approximately 400gm.,
K Mechanism: Approximately 600gm.)

The tooth pitch of Worm gear which has been extended against the previous model, is located on the Motor so that Worm gear can be reversed. Consequently, the Motor rotates before the insertion spring (the combined spring) is working when the cassette tape is inserted, so that the repelled force of the insertion spring has been reduced as differing from the present model.

③ Small-sized Cassette holder unit (Thinned unit)

a. The Wiper arm method which has been adopted, assigned Wiper arm between Cassette Holder Plate and Side Plate so that the small-sized of the width has been realized.
b. To prevent the increment of parts quantity such as Safety lever is used for Pre-open mechanism shown in the present model, and the small-sized unit has been realized by inclining one portion of the L groove in Side Plate.
c. The part of driving change-over is located in the nearest to the center of Reel so that the depth size is compacter.

1-3. Reel brake

(1) Supply Reel Brake is used for Tension Regulator which is composed of the conventional Main brake and the soft brake function.

(2) Take-up Reel Brake is used as Band Brake unit in order to correspond with Supply Reel Brake.

※ Tension Regulator performance:
This is composed of Tension regulator and brake. The tape always is given the tension against the advance direction by Tension band.

(3) Construction of Supply reel tension regulator
Comparison of the construction with the conventional model

	Z Mechanism	K Mechanism
Tension Arm Shaft Bearing construction	Resin	Tension arm
Tension Band	Felt less Lumiller	Felt Lumiller
Braking method	Tension regulator	Main & soft brake

Operating mode and necessary function

Mechanism mode	Necessary function	Operation
Cassette down	Prevention of the tape slag (Soft brake)	Soft brake
Completion of Loading	Prevention of the tape slag (Soft brake)	Tension regulator
REV	Prevention of in Play mode to REV mode (Soft brake)	Tension regulator
PLAY, FF	Back tension adjustment	Same as the conventional
STOP	Main brake function	Tension regulator

(4) Construction of Take-up brake

Take-up brake is used Band brake as well as Supply brake depend on corresponding with Band brake is adopted at the Supply Side.

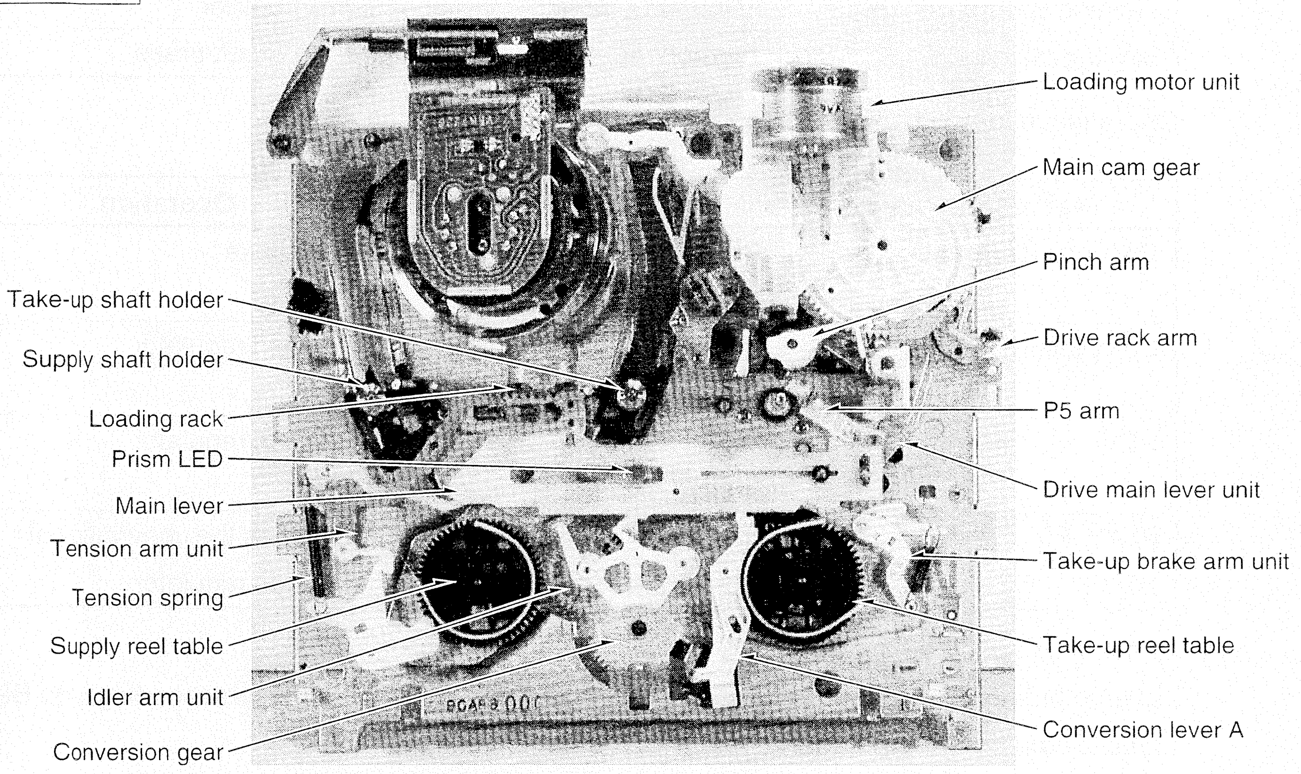
Mechanism mode	Function	Band
EJECT-MID	Soft brake	On
REV	Soft brake	On
PLAY	Release of brake	Off
STOP	Brake	On
FF/REW	Release of brake	Off

1-4. Number of Gear Phase Alignment Point and Replacement Parts

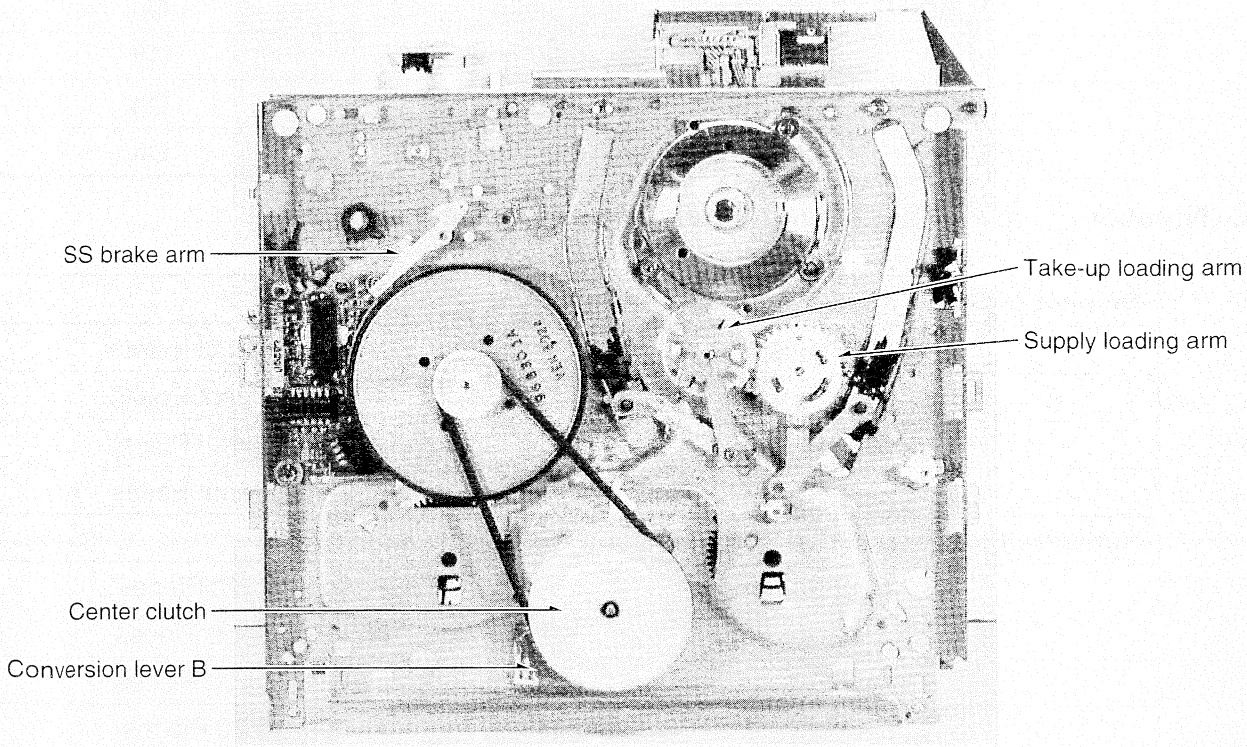
Number of Gear Phase˙ Alignment Point	
G2 Mechanism	12 Alignment Points
G Mechanism	12 Alignment Points
K Mechanism	6 Alignment Points
Z Mechanism	4 Alignment Points
Number of Replacement Parts˙ (including the Screw and Washer)	
G2 Mechanism	Approx.170 Pieces
G Mechanism	Approx. 150 Pieces
K Mechanism	Approx. 100 Pieces
Z Mechanism	Approx. 70 Pieces

Z Mechanism Components

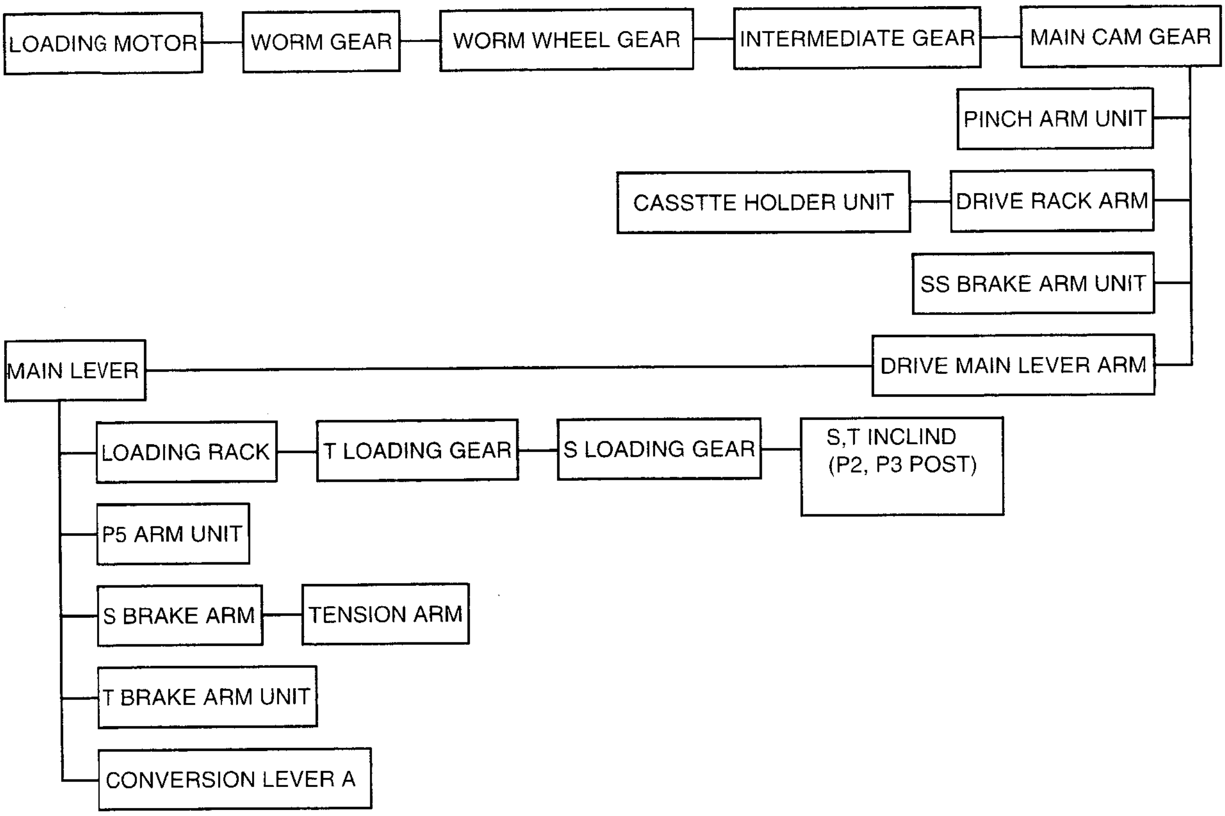
TOP VIEW

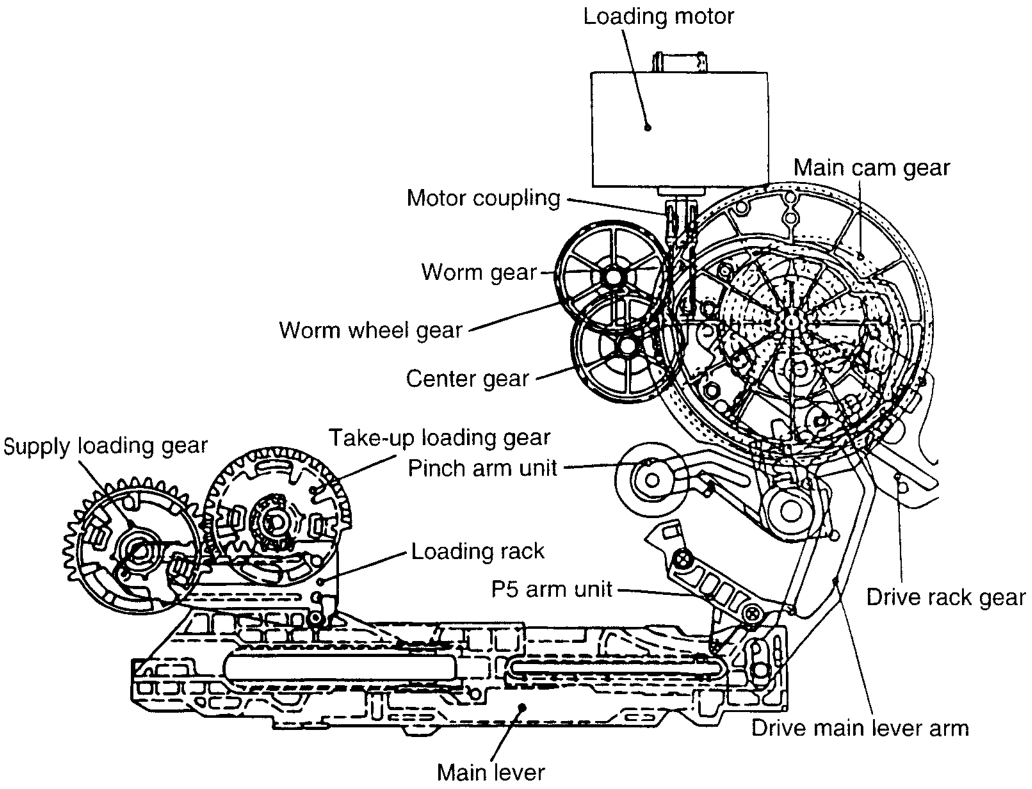

Loading motor unit
Main cam gear
Pinch arm
Drive rack arm
P5 arm
Drive main lever unit
Take-up brake arm unit
Take-up reel table
Conversion lever A
Take-up shaft holder
Supply shaft holder
Loading rack
Prism LED
Main lever
Tension arm unit
Tension spring
Supply reel table
Idler arm unit
Conversion gear

BOTTOM VIEW


SS brake arm
Take-up loading arm
Supply loading arm
Center clutch
Conversion lever B

FLOW CHART OF LOADING MECHANISM


LOADING MOTOR
WORM GEAR
WORM WHEEL GEAR
INTERMEDIATE GEAR
MAIN CAM GEAR
PINCH ARM UNIT
CASSTTE HOLDER UNIT
DRIVE RACK ARM
SS BRAKE ARM UNIT
MAIN LEVER
DRIVE MAIN LEVER ARM
LOADING RACK
T LOADING GEAR
S LOADING GEAR
S,T INCLIND
(P2, P3 POST)
P5 ARM UNIT
S BRAKE ARM
TENSION ARM
T BRAKE ARM UNIT
CONVERSION LEVER A


Loading motor
Main cam gear
Motor coupling
Worm gear
Worm wheel gear
Center gear
Supply loading gear
Take-up loading gear
Pinch arm unit
Loading rack
P5 arm unit
Drive rack gear
Drive main lever arm
Main lever

2. REMOVAL OF CASSETTE TAPE

There are 2 ways to remove a cassette tape.

2-1. Removal of compulsory loading

(1) Press FF and EJECT buttons simultaneously for more than 3 seconds and set the Service Mode 7.

In case of VCR mounted shuttle ring, turn the shuttle ring to FF and then press EJECT button for more than 3 seconds.

In Loewe model, STOP button is used instead of FF button.

(2) Press STOP button in order to unload the mechanism. (Pay an attention of tape slack)

Service Mode Indication :

7 ※※ ※※ (STOP)→7 00 ※※ (EJECT)

2-2. Removal of manual operation of Main cam gear

(1) Disconnect the AC power cord and remove Top Panel.

(2) Rotate Main cam gear to the clockwise and unload the mechanism (Tape is remaining) (Fig. A1).

TOP VIEW

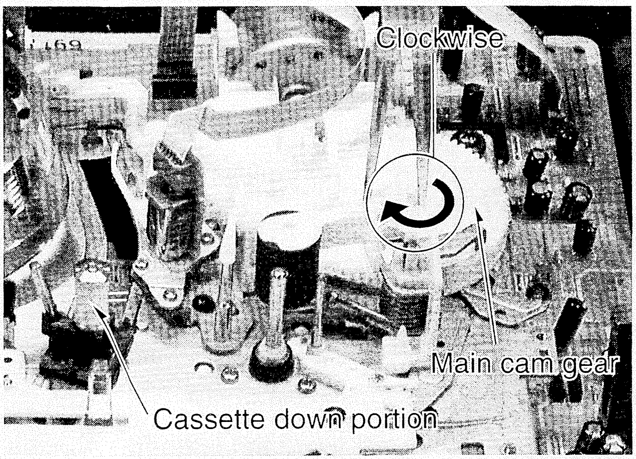


Fig. A1

(3) Rotate the Pole of Capstan motor to the clockwise from the bottom in order to remove the tape slack (Fig. A2).

BOTTOM VIEW

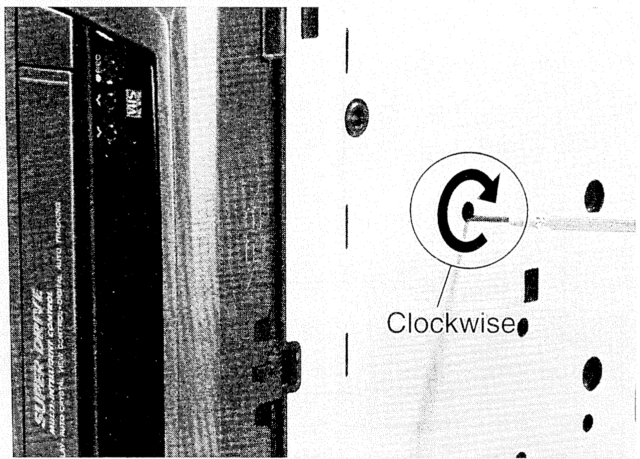


Fig. A2

(4) Rotate Main cam gear to the clockwise in order to eject the cassette tape.

3. REMOVAL OF CASSETTE HOLDER UNIT & MECHANISM CHASSIS

3-1. Removal of Cassette holder unit

(1) Remove Top panel and Front panel unit (Fig. B1).

TOP VIEW

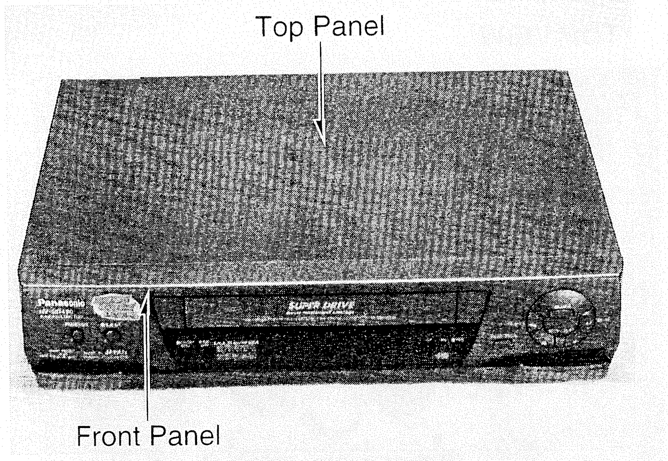

Top Panel
Front Panel

Fig. B1

(2) Remove Top plate

Remove 4 tabs fixing Top plate and remove Top plate (Fig. B2).

※ 4 Tabs should be removed softly due to they are fragile.

TOP VIEW

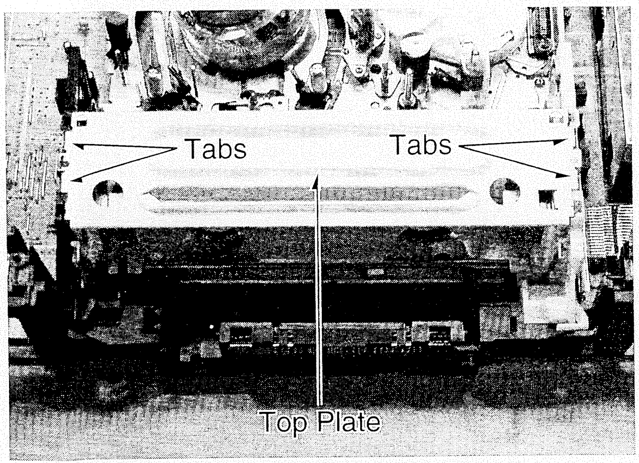

Tabs
Tabs
Top Plate

Fig. B2

(3) Remove Cassette Holder

Keep pressing 2 stoppers on Cassette holder and Press Cassette holder to the rear and remove it from Left and Right Side Plate (Fig. B3).

TOP VIEW

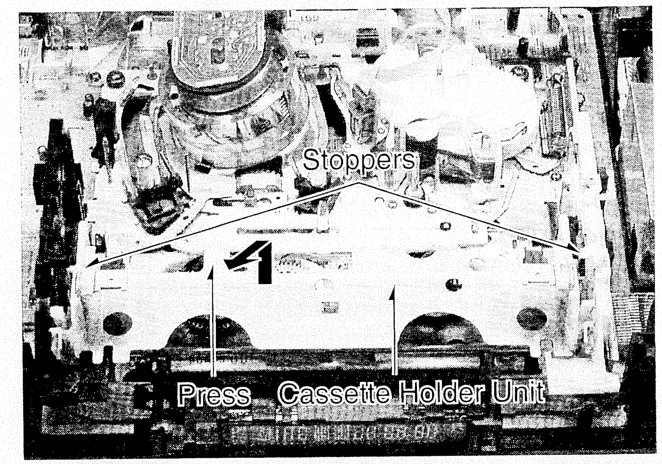

Stoppers
Press
Cassette Holder Unit

Fig. B3

(4) Remove Left and Right Side Plate

Remove connection spring of Drive gear.

Remove 3 red screws, 3 tabs and remove Left and Right Side Plate (Fig. B4, B5).

TOP VIEW

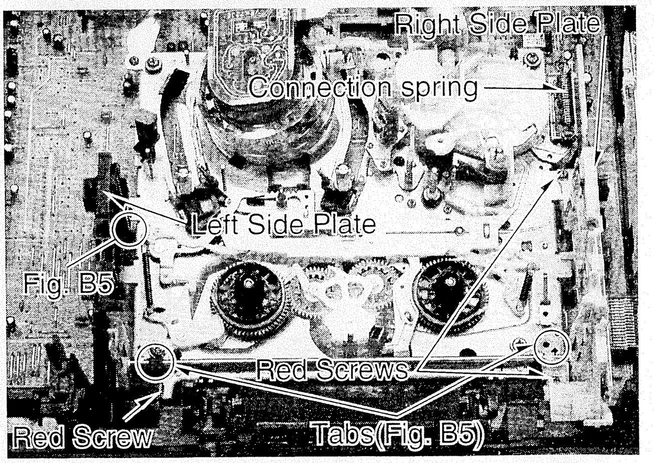

Right Side Plate
Connection spring
Left Side Plate
Fig. B5
Red Screws
Red Screw
Tabs(Fig. B5)

Fig. B4

TOP VIEW

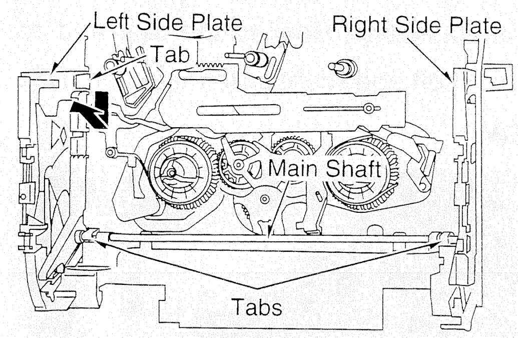

Left Side Plate
Tab
Right Side Plate
Main Shaft
Tabs

Fig. B5

(5) Remove Main shaft (Fig. B6)

TOP VIEW

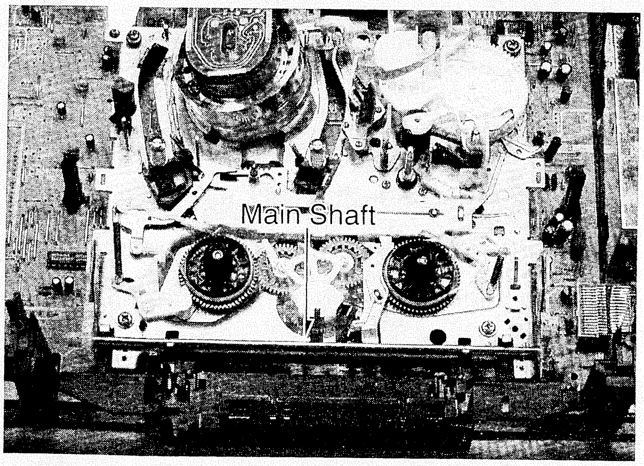


Fig. B6

3-2. Removal of Mechanism chassis

(1) Remove Mechanism chassis

Disconnect P3001, P2502 and P4002 (the connectors of Head amp C.B.A., Cylinder unit and A/C Head). Remove 5 screws (3 red screws and 2 gold screws) on Mechanism chassis and take out Mechanism chassis (Fig. B7).

TOP VIEW

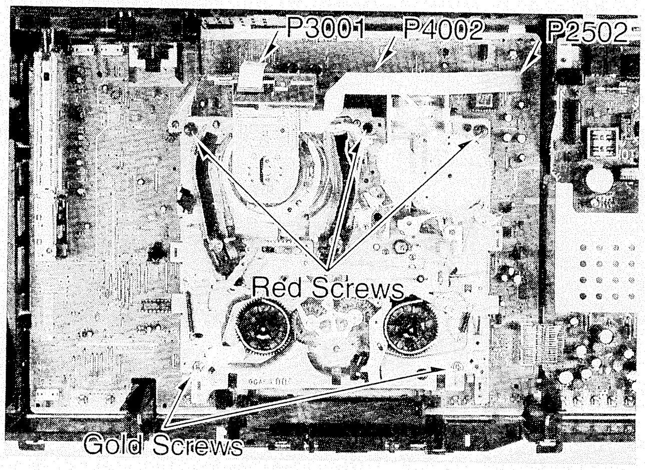

P3001
P4002
P2502
Red Screws
Gold Screws

Fig. B7

4. DISASSEMBLY/ASSEMBLY METHOD FOR MECHANISM

4-1. Disassembly of mechanism

1. Removal of Pinch arm

   Unlock the tab (opener piece). Remove Opener piece and Pinch arm (Fig. C1).

2. Removal of Loading motor unit

   Unlock 3 tabs and remove Loading motor unit (Fig. C1, C2).

   2 tabs of them located on the bottom of the Mechanism (Fig. C2).

TOP VIEW

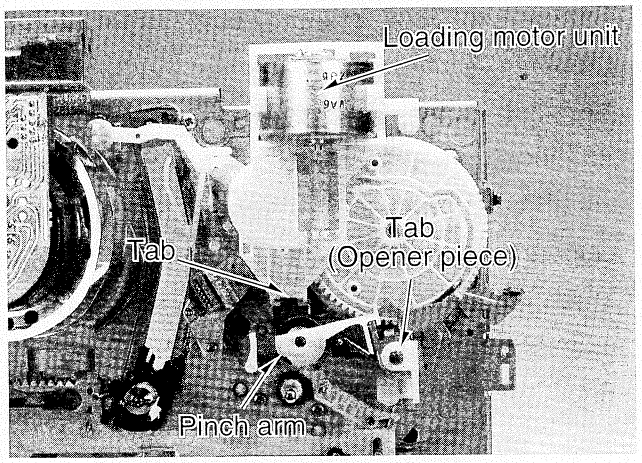

Loading motor unit
Tab
Tab
(Opener piece)
Pinch arm

Fig. C1

BOTTOM VIEW

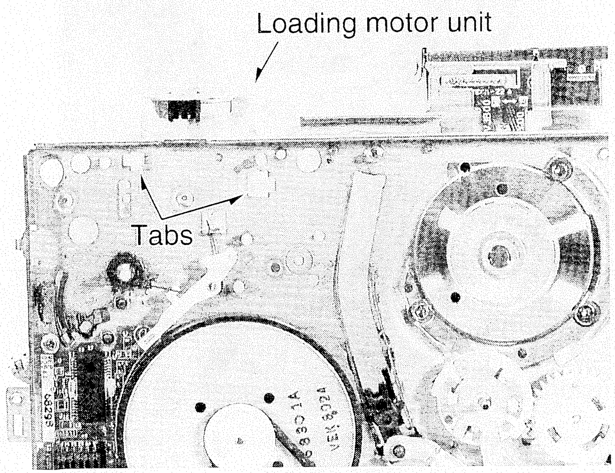

Loading motor unit
Tabs

Fig. C2

3. Removal of Main cam gear

   Remove Snap washer located on the bottom of Chassis by using retaining ring remover (Fig. C3) and remove Main cam gear (Fig. C4).

BOTTOM VIEW

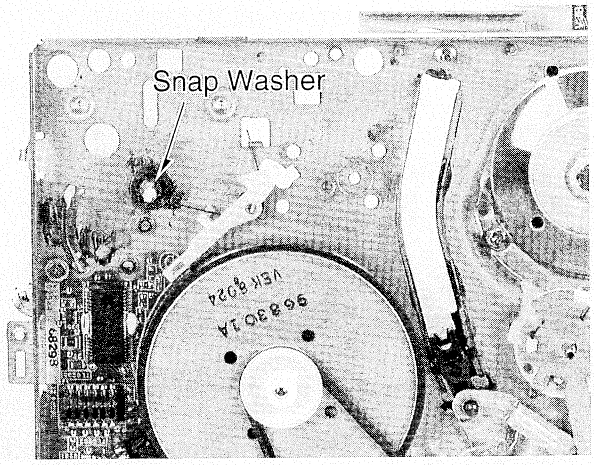

Snap Washer

Fig. C3

TOP VIEW

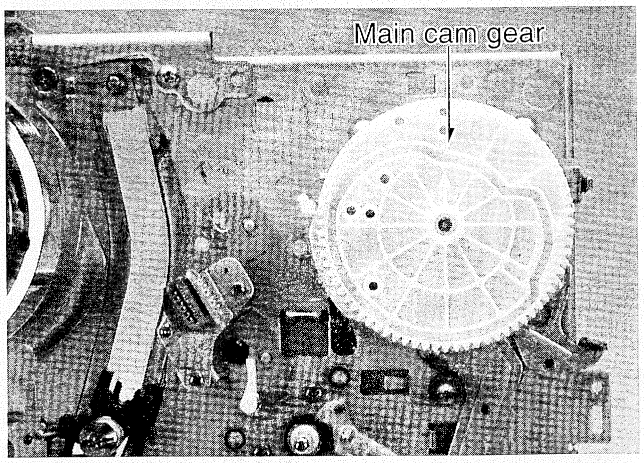

Main cam gear

Fig. C4

4. Removal of Drive rack arm
Rotate Drive rack arm to the counterclockwise and remove it (Fig. C5).

TOP VIEW

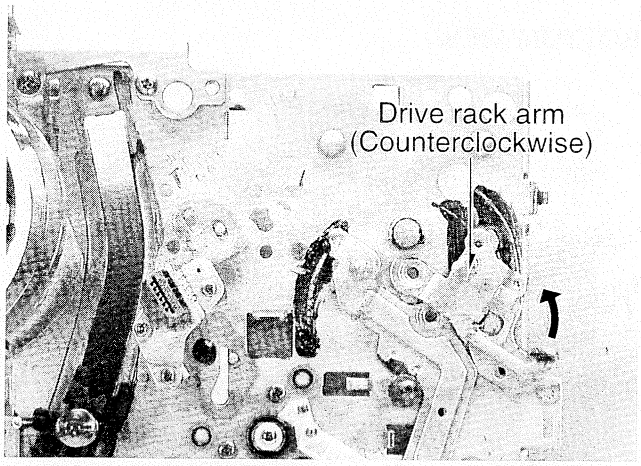

Drive rack arm
(Counterclockwise)

Fig. C5

5. Removal of Main lever, P5 arm and Conversion lever A
Unlock 2 tabs of Prism LED and 1 tab on the projection of Chassis while keep lifting the left side of Main lever, and remove Main lever, P5 arm and Conversion lever A (Fig. C6).

※ It is easier to unlock the tabs by using a tweezer.

TOP VIEW

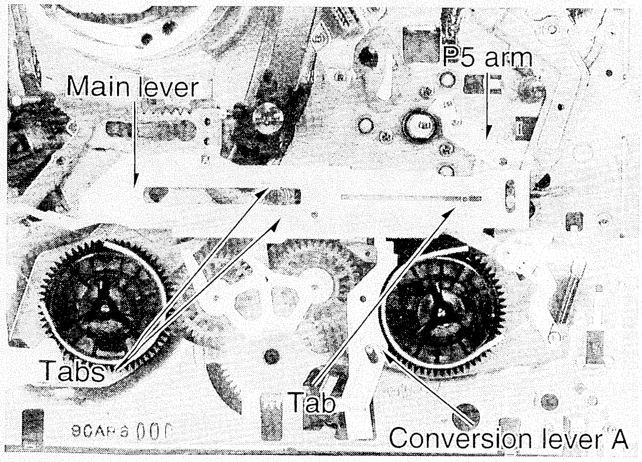

P5 arm
Main lever
Tabs
Tab
Conversion lever A

Fig. C6

6. Removal of Drive main lever arm
Rotate Drive main lever arm to the counterclockwise and remove it (Fig. C7).

TOP VIEW

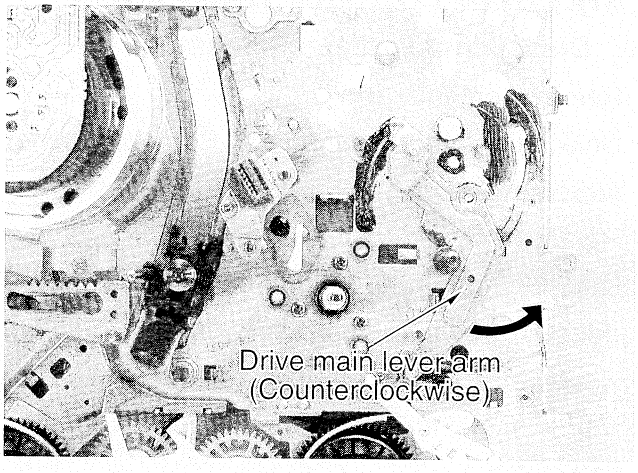

Drive main lever arm
(Counterclockwise)

Fig. C7

7. Removal of Tension arm unit and Supply reel table
Remove Tension spring (Fig. C8). Unlock the tab of Tension arm projection on the bottom of Chassis (Fig. C9) and remove Tension arm unit and Supply reel table (Fig. C8).

※ When remove supply reel table, be sure whether a washer attaches on Supply reel table shaft (Fig. C10).

TOP VIEW

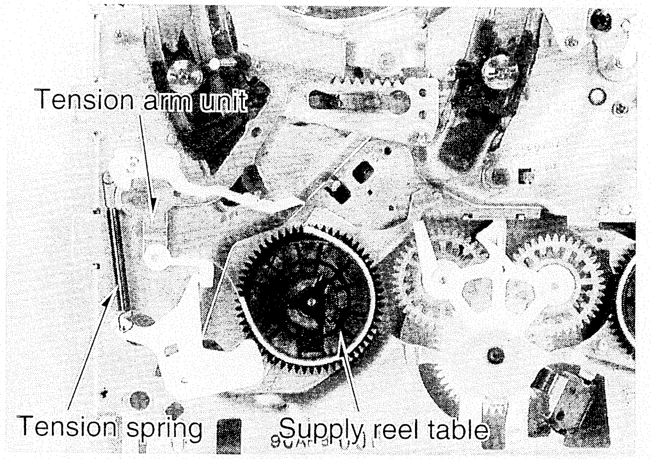

Tension arm unit
Tension spring
Supply reel table

Fig. C8

BOTTOM VIEW

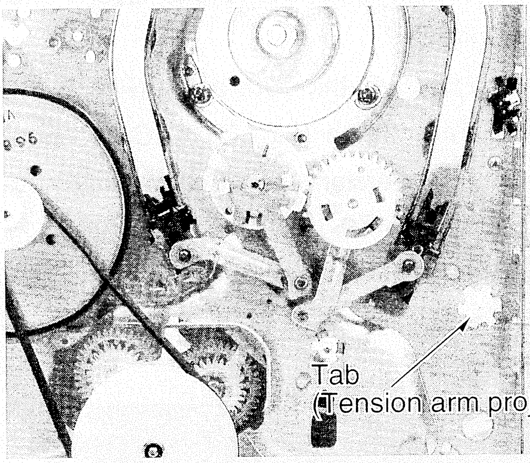

Tab
(Tension arm projection)

Fig. C9

SIDE VIEW

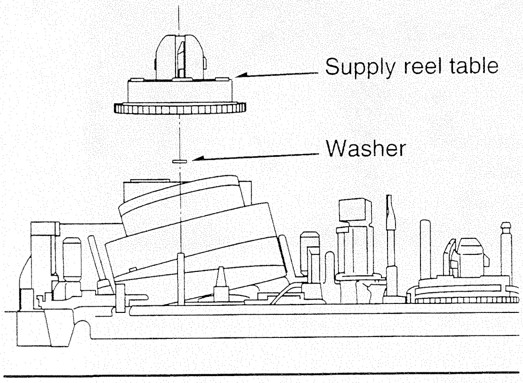

Supply reel table
Washer

Fig. C10

8. Remove of Take-up brake arm unit and Take-up reel table
   Unlock the tab of Take-up brake arm unit from the bottom of Chassis (Fig. C12). Remove Take-up brake arm unit and Take-up reel table (Fig. C11).

※ When remove Take-up reel table, be sure whether a washer attaches on Take-up reel table shaft (Fig. C13).

TOP VIEW

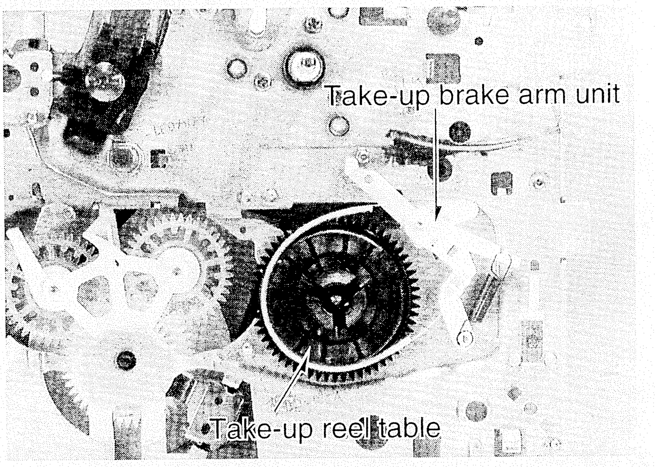

Take-up brake arm unit
Take-up reel table

Fig. C11

BOTTOM VIEW

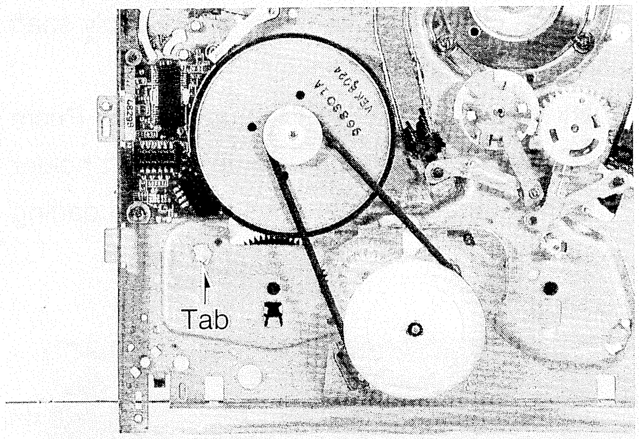


Fig. C12

SIDE VIEW

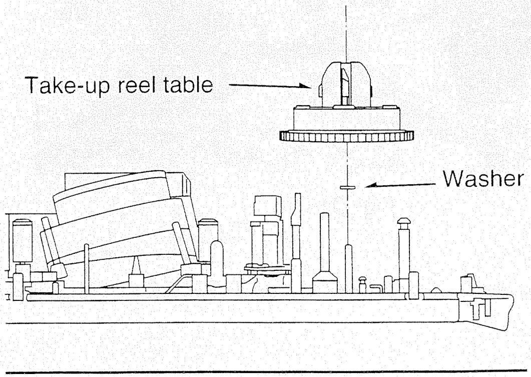

Take-up reel table
Washer

Fig. C13

9. Removal of Take-up & Supply loading arm

Unlock the tab and remove Take-up and Supply loading arm (Fig. C14).

BOTTOM VIEW

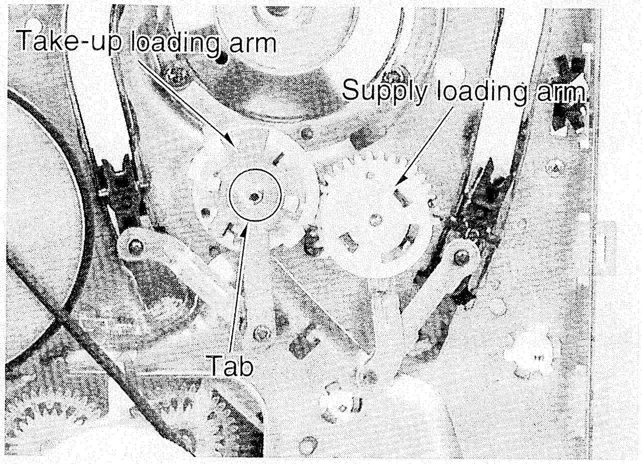

Take-up loading arm
Supply loading arm
Tab

Fig. C14

10. Removal of Prism LED, Take-up & Supply shaft holder and Loading rack

Push the tab of Prism LED and remove Prism LED. Remove Take-up and Supply shaft holder from the groove of Chassis and remove Loading rack (Fig. C15).

TOP VIEW

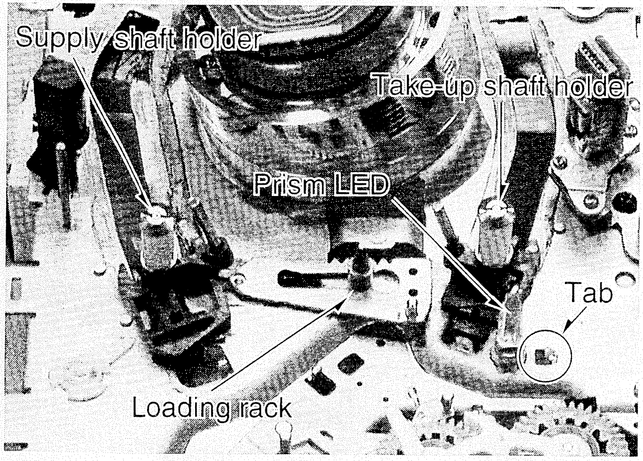

Supply shaft holder
Take-up shaft holder
Prism LED
Tab
Loading rack

Fig. C15

11. Removal of Center clutch, Conversion gear spring, Conversion gear, Conversion lever B and Idler arm unit

Remove the Belt and the Cut washer (Fig. C16).

Remove Center clutch (Fig. C16), Conversion gear spring, Conversion gear, Conversion lever B and Idler arm unit (Fig. C17).

※ Pay an attention of Conversion gear spring during the removal.

BOTTOM VIEW

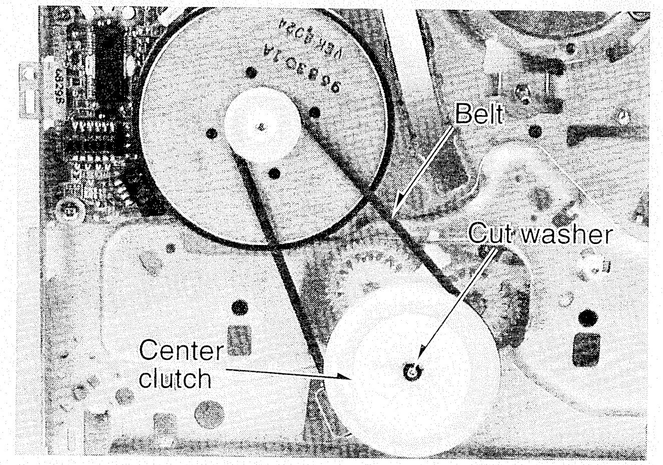

Belt
Cut washer
Center clutch

Fig. C16

BOTTOM VIEW

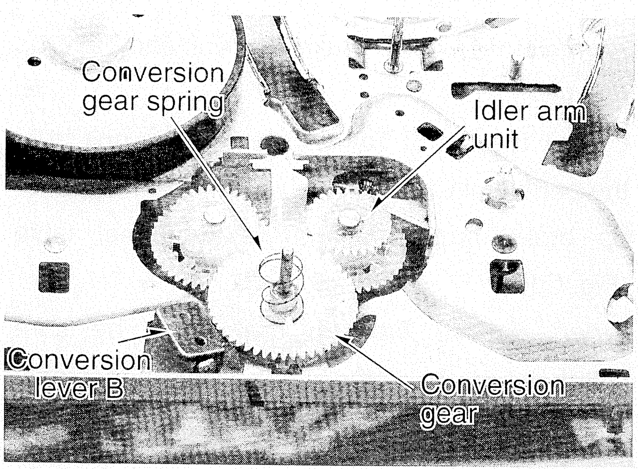

Conversion gear spring
Idler arm unit
Conversion lever B
Conversion gear

Fig. C17

12. Removal of Capstan unit

Remove 3 gold screws (Fig. C18).

Remove 2 gold screws on the bottom of Chassis (Fig. C19).

Keep moving SS brake arm and remove Capstan unit.

TOP VIEW

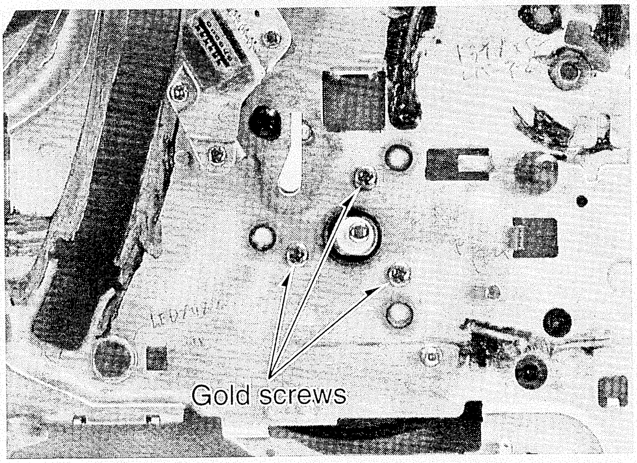

Gold screws

Fig. C18

BOTTOM VIEW

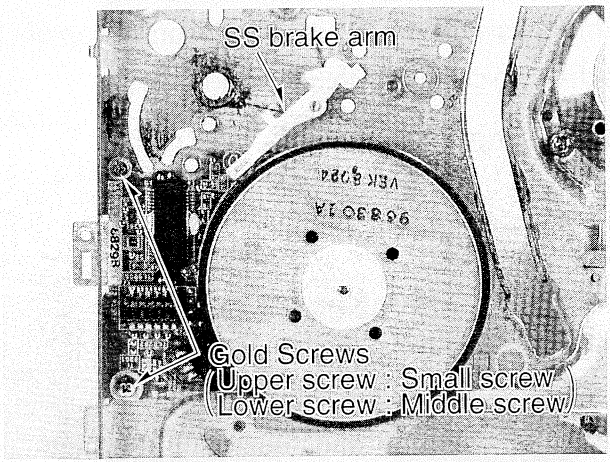

SS brake arm
Gold Screws
(Upper screw : Small screw
Lower screw : Middle screw)

Fig. C19

13. Removal of Cylinder unit

Remove red screw (Fig. C20).

Remove 3 gold screws on the bottom of Chassis and remove Cylinder unit (Fig. C21).

TOP VIEW

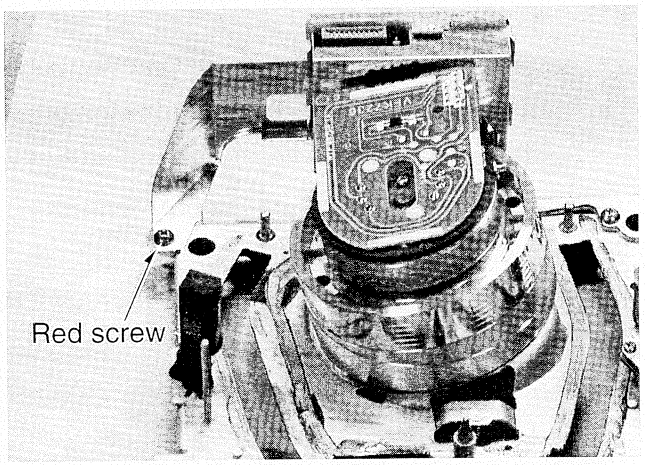


Fig. C20

BOTTOM VIEW

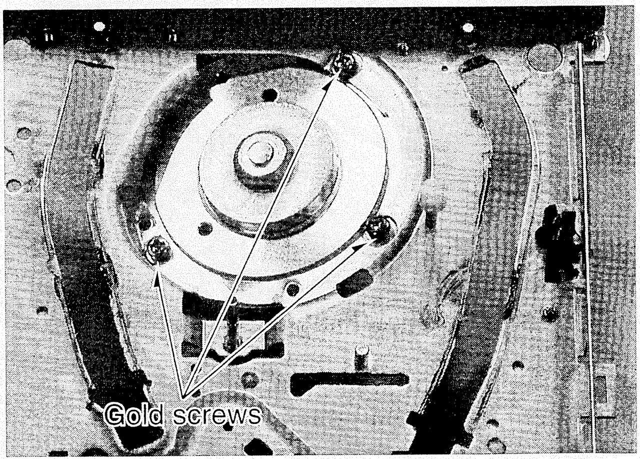

Gold screws

Fig. C21

4-2. Assembly and phase adjustment of mechanism

The gear phase alignment has been performed in the EJECT position and it is crucial for the Z Mechanism to operate correctly.

NOTE: In case of the parts replacement like Position switch, Mechanism position should be set to Eject position in order to fit the phase of Position switch.

1. Assembly and phase adjustment of Mechanism

(1) Assembly of Cylinder unit

Cylinder unit should be fixed by 3 screws (GOLD) from the bottom side of Mechanism chassis and red screw on the top side of Mechanism Chassis (Fig. E1, E2).

BOTTOM VIEW

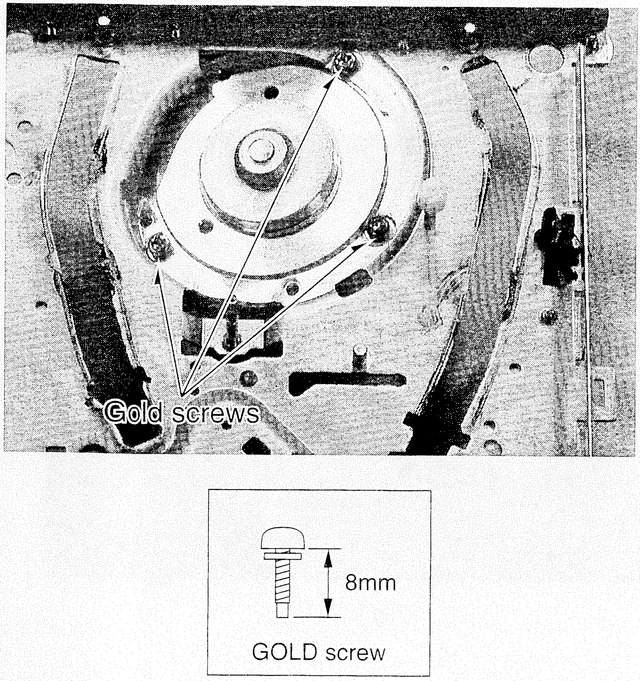

Gold screws
8mm
GOLD screw

Fig. E1

TOP VIEW

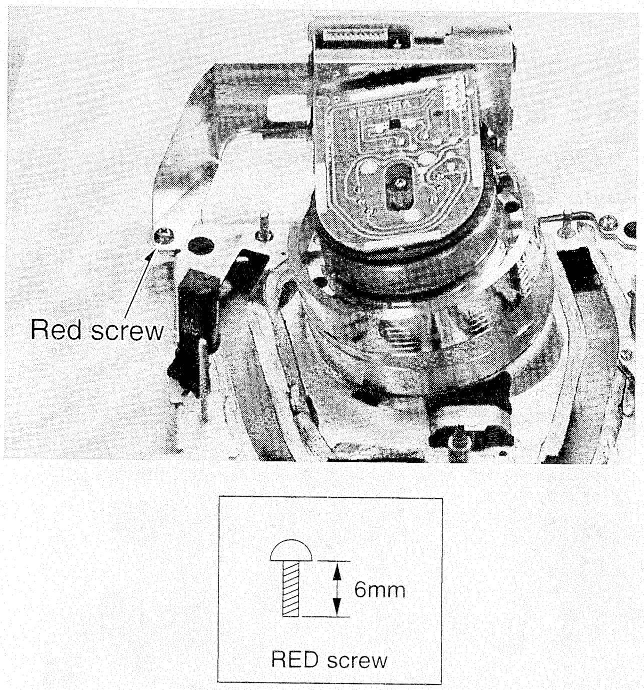

Red screw
6mm
RED screw

Fig. E2

(2) Assembly of Capstan unit

Move SS brake arm in the direction of arrow (see Fig. E3) and capstan unit should be fixed by 2 screws (GOLD) on the bottom side of Mechanism chassis and 3 screws (GOLD) on the top of Mechanism chassis (Fig. E3, E4).

BOTTOM VIEW

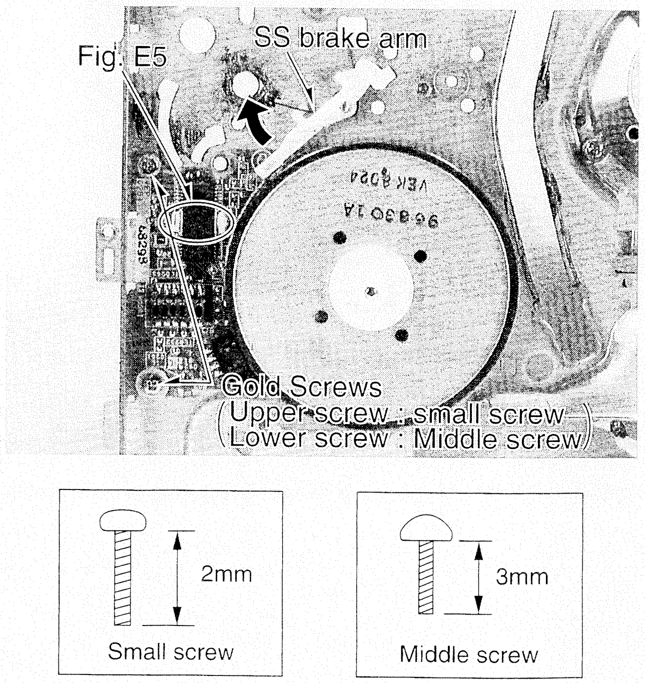


Fig. E5
SS brake arm
Gold Screws
(Upper screw : small screw
Lower screw : Middle screw)
2mm
Small screw
3mm
Middle screw

Fig. E3

TOP VIEW

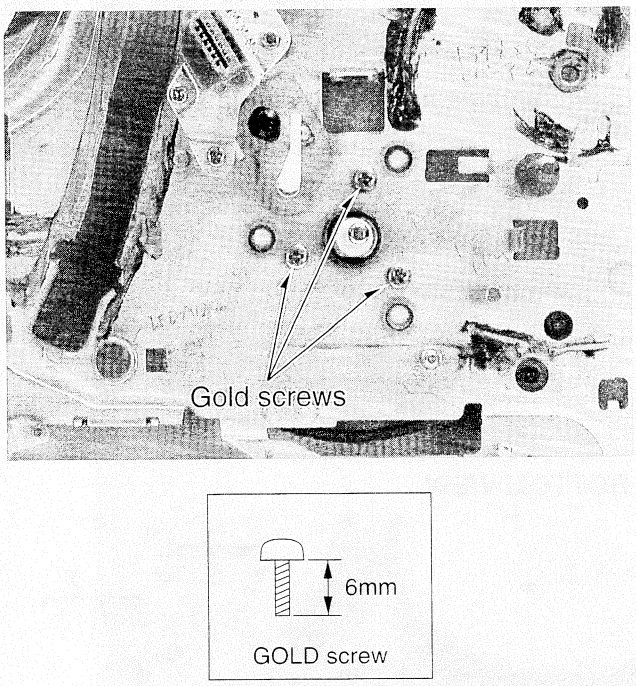


Fig. E4

NOTE: Replacement of Capstan unit and Procedure of applying the silicone grease.

REPLACEMENT OF CAPSTAN UNIT

In case of replacement of the Capstan Unit the Silicone grease have to be applied between the Mechanism chassis and the Drive IC by the following procedure.

Silicone grease No. VFK1301 for radiation of the Drive IC

Silicone grease is used for the radiation of the Drive IC. The heat occurred on the IC is radiated to the Mechanism chassis through the grease. In case of the incomplete radiation, the safety circuit operates depending on the rise of the temperature and it possibility stop the operation of the Drive IC.

PROCEDURE OF APPLYING THE SILICONE GREASE

① There is a cut-out part at the Drive IC mounting position and the bottom of the IC can be seen from the cut-out part. Apply the Silicon grease to whole the cut-out part of IC as shown in Fig. E5-1 so that the grease is piled 0.3–0.5 mm from the surface of the C.B.A.

② Next, from the component side of the C.B.A., apply the Silicon grease so that the grease is piled at the metal of the center of the IC as shown in Fig. E5-2.

SIDE VIEW

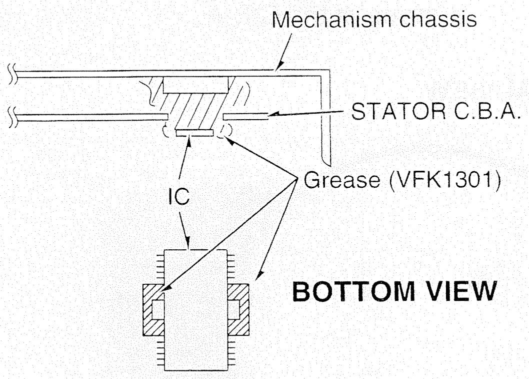


Fig. E5

TOP VIEW

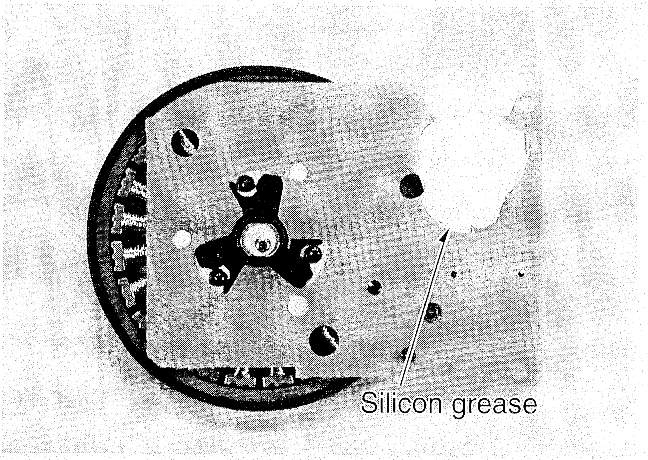

Silicon grease

Fig. E5-1

Fig. E5-1. Apply the Silicon grease so that the grease is piled 0.3–0.5 mm from the surface of the C.B.A.

BOTTOM VIEW

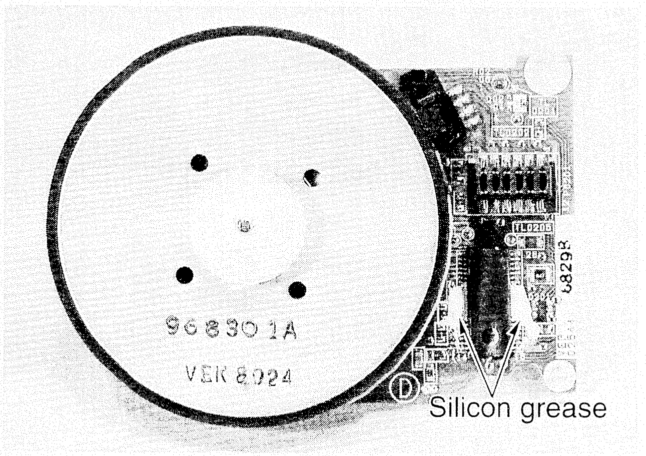

968301A
VEK 8924
D
Silicon grease

Fig. E5-2

Fig. E5-2. Apply the Silicon grease at the metal of the center of the IC.

(3) Assembly of Idler arm unit, Conversion lever B, Conversion gear, Conversion gear spring and Center clutch

Put above parts together in the following order and fix them by Cut washer (Fig. E6), and install Capstan belt.

① Idler arm unit
② Conversion lever B
③ Conversion gear
④ Conversion gear spring
⑤ Center clutch

BOTTOM VIEW

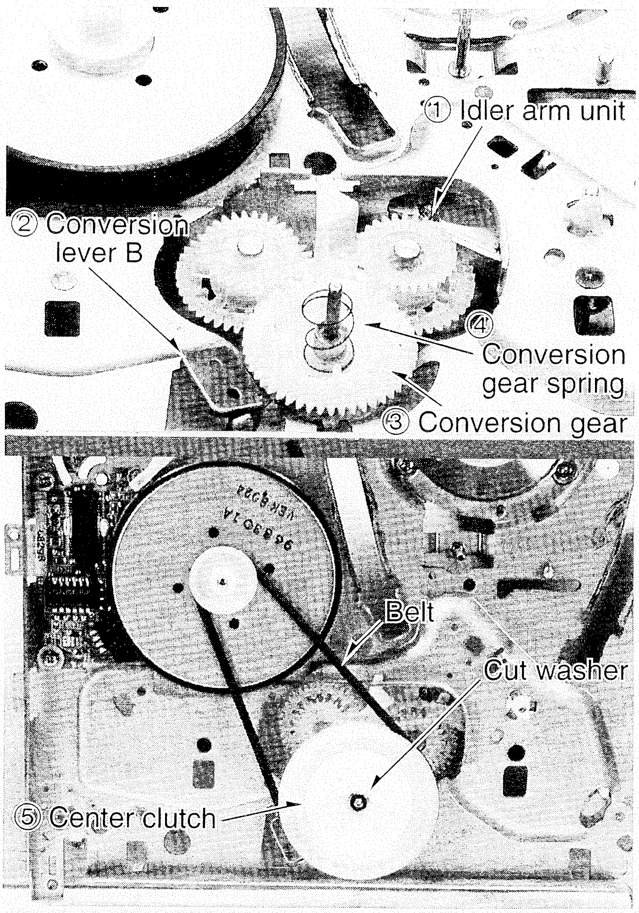

① Idler arm unit
② Conversion lever B
④ Conversion gear spring
③ Conversion gear
Belt
Cut washer
⑤ Center clutch

Fig. E6

(4) Assembly of Loading rack, Take-up & Supply shaft holder and Prism LED

Adjust the phase between the hole of Loading rack position fixture and the penetration hole of Chassis. Install Take-up and Supply shaft holder so that Take-up and Supply shaft holder fits the groove of Chassis.

Put Prism LED together (Fig. E7).

TOP VIEW

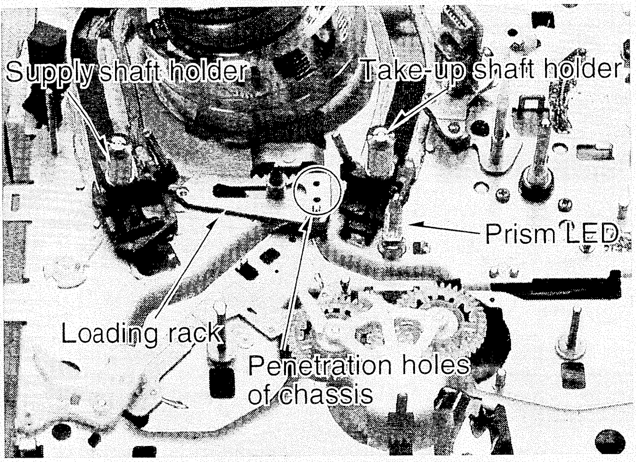

Supply shaft holder
Take-up shaft holder
Prism LED
Loading rack
Penetration holes of chassis

Fig. E7

(5) Assembly of Take-up and Supply Loading arm

Move Shaft holder to the unloading position. Adjust the phase of Take-up and Supply loading arm and insert the arm to the shaft (Fig. E8).

BOTTOM VIEW

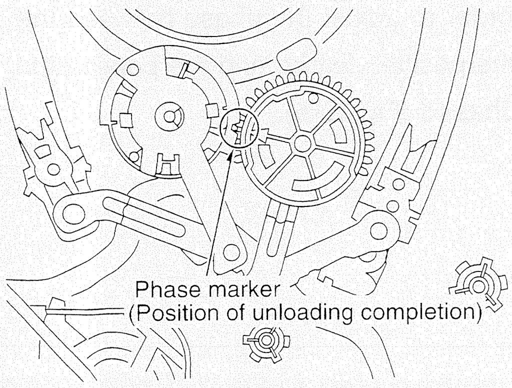

Phase marker
(Position of unloading completion)

Fig. E8

(6) Assembly of Take-up reel table and Take-up brake arm unit

Put washer, (Fig. E10) Take-up reel table and Take-up brake arm unit together (Fig. E9).

NOTE: The shape between portion A for Take-up reel table and portion B for Supply reel table is different.

Therefore, confirm the shape of portion A and B before mounting reel tables. If Take-up reel table has been confused with Supply reel table and they have been installed, the trouble of reel table rotation slip happens (Fig. E11).

TOP VIEW

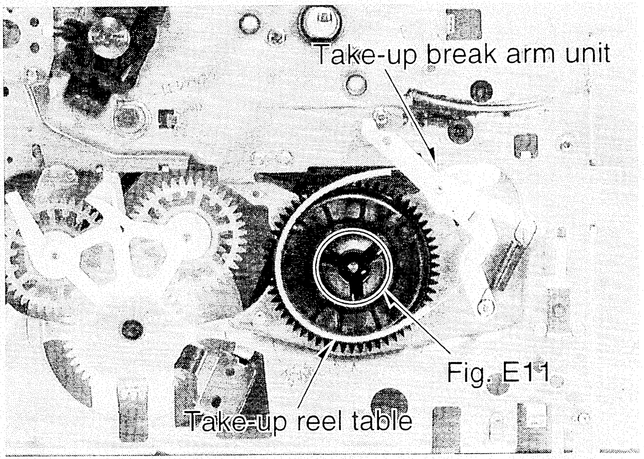

Take-up break arm unit
Fig. E11
Take-up reel table

Fig. E9

SIDE VIEW

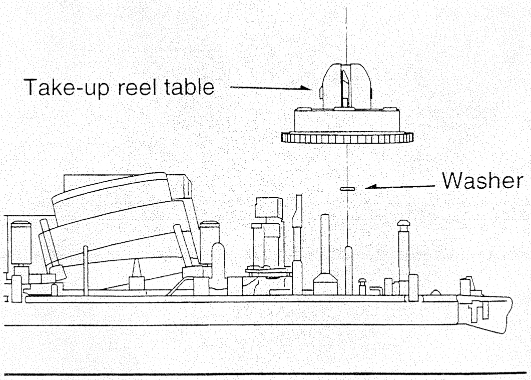

Take-up reel table
Washer

Fig. E10

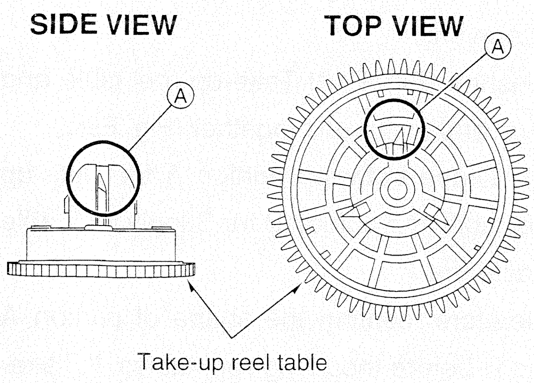

SIDE VIEW
TOP VIEW
A
A
Take-up reel table

Fig. E11

(7) Assembly of Supply reel table and Tension arm unit
Install washer (Fig. E13) and Supply reel table. Insert Tension arm unit to Tension arm projection and hang Tension spring with Supply spring arm projection (Fig. E12).
※1 Pay an attention of Position of the Supply spring arm.

NOTE: The shape between portion A for Take-up reel table and portion B for Supply reel table is different.
Therefore, confirm the shape of portion A and B before mounting reel tables. If Take-up reel table has been confused with Supply reel table and they have been installed, the trouble of reel table rotation slip happens (Fig. E14).

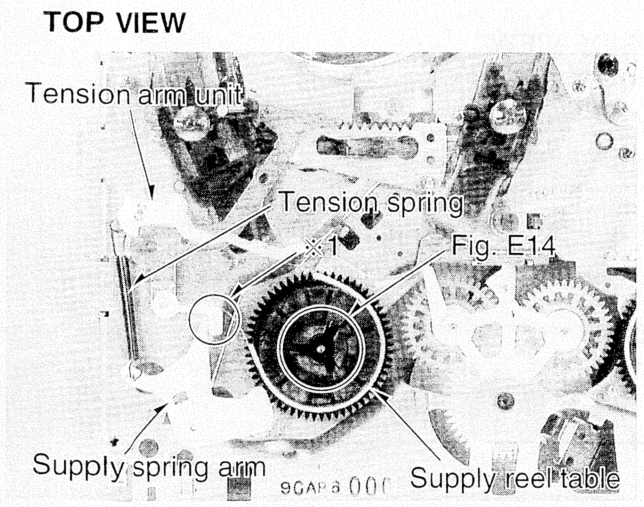

TOP VIEW
Tension arm unit
Tension spring
※1
Fig. E14
Supply spring arm
Supply reel table

Fig. E12

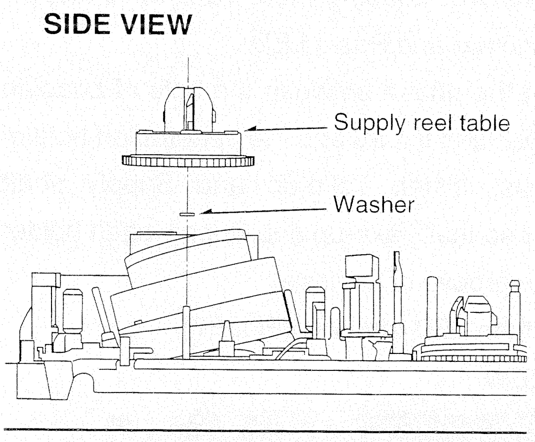

SIDE VIEW
Supply reel table
Washer

Fig. E13

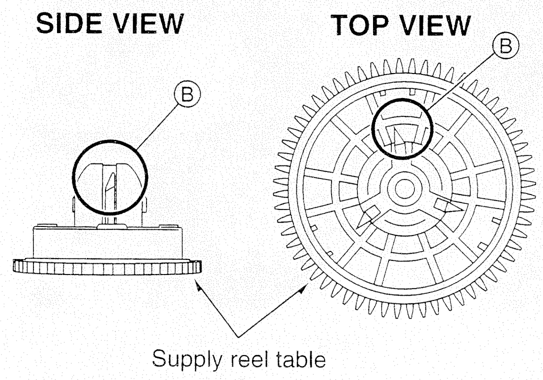

SIDE VIEW
TOP VIEW
B
B
Supply reel table

Fig. E14

(8) Assembly of Drive main lever arm
Install Drive main lever arm so that Drive main lever arm fits to the groove of Chassis.
And rotate Drive main lever arm to the clockwise in order to adjust the phase between the hole of the position fixture and the penetration hole of Chassis (Fig. E15).

TOP VIEW

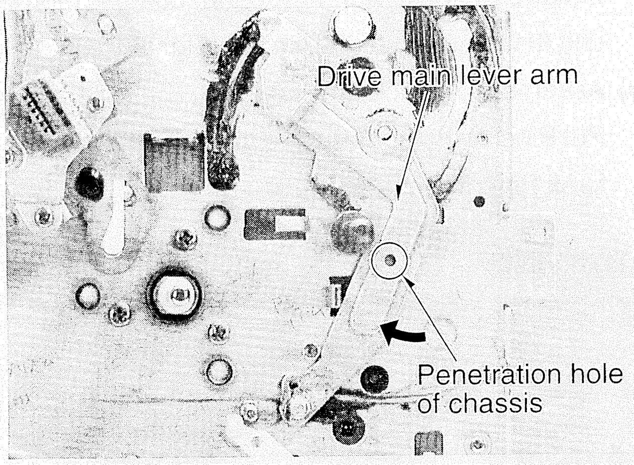

Drive main lever arm
Penetration hole of chassis

Fig. E15

(9) Assembly of Conversion lever A, P5 arm and Main lever

Install Conversion lever A and P5 arm (Fig. E16, E17).

Adjust the phase of Main lever so that Main lever fits the projection of Loading rack.

Main lever has to be locked at the projection of Chassis by 1 tab, and 2 tabs of Prism LED (Fig. E16).

※ Conversion lever A, P5 arm, Supply brake arm unit and the projection of Take-up brake arm have to be installed to the groove under the Main lever (Fig. E18).

TOP VIEW

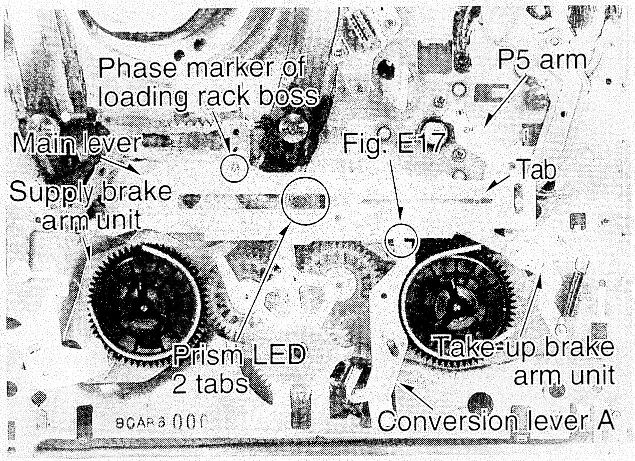

Phase marker of loading rack boss
P5 arm
Main lever
Fig. E17
Tab
Supply brake arm unit
Prism LED 2 tabs
Take-up brake arm unit
Conversion lever A

Fig. E16

TOP VIEW

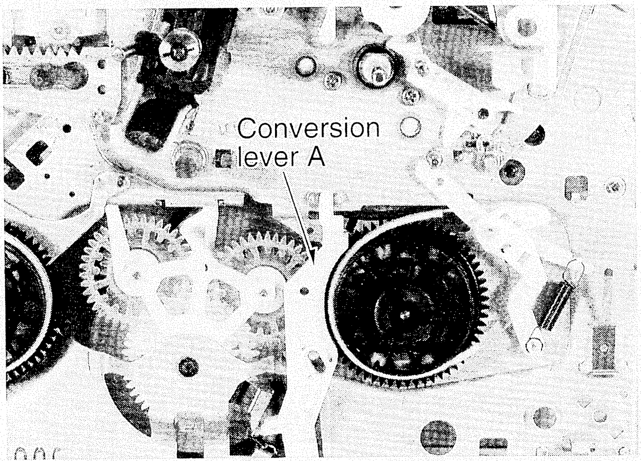

Conversion lever A

Fig. E17

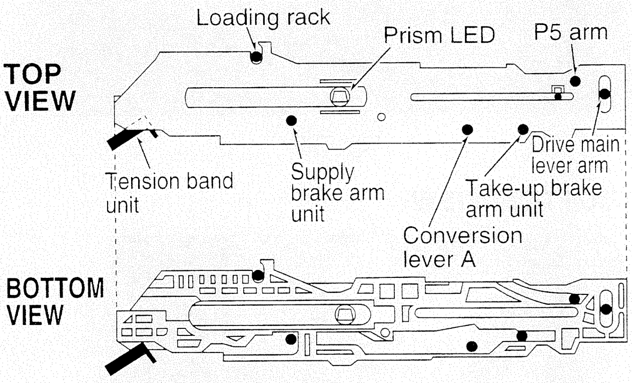

TOP VIEW
Loading rack
Prism LED
P5 arm
Drive main lever arm
Tension band unit
Supply brake arm unit
Take-up brake arm unit
Conversion lever A
BOTTOM VIEW

Fig. E18

(10) Assembly of Drive rack arm

Install Drive rack arm so that Drive rack arm fits the groove of Chassis and rotate it to the clockwise in order to fit the penetration hole of Chassis (Fig. E19).

TOP VIEW

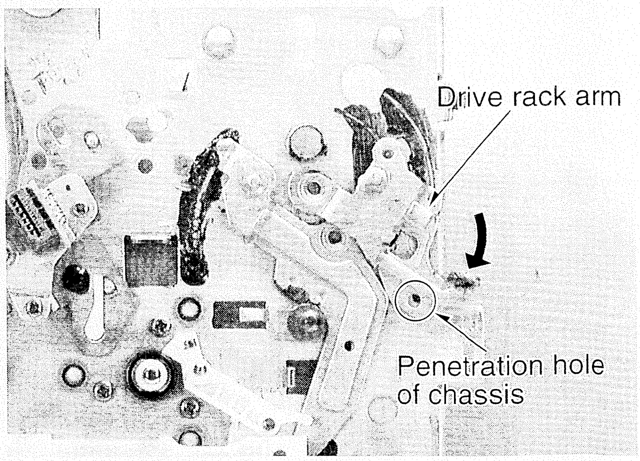

Drive rack arm
Penetration hole of chassis

Fig. E19

(11) Assembly of Main cam gear

Install Main cam gear so that Main cam gear fits the penetration hole of Chassis (Fig. E20) and fix it by the snap washer from the bottom of Chassis (Fig. E21).

TOP VIEW

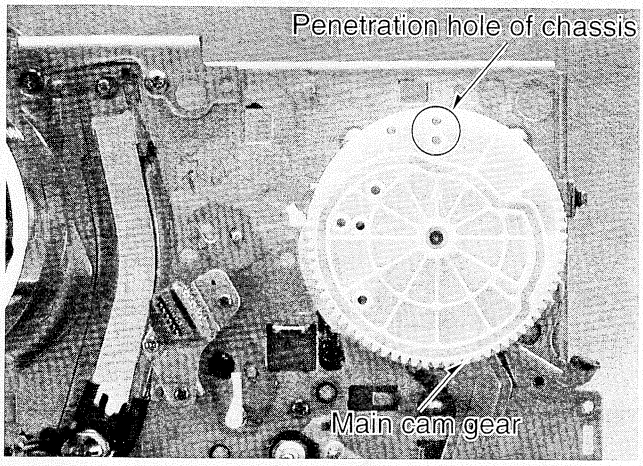

Penetration hole of chassis
Main cam gear

Fig. E20

BOTTOM VIEW

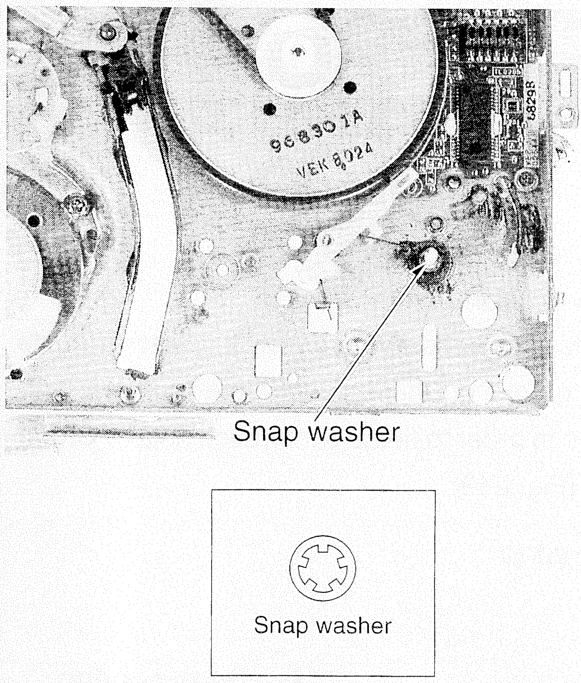

Snap washer
Snap washer

Fig. E21

(12) Assembly of Loading motor unit

Install Loading motor unit so that Loading motor unit fits the groove of Chassis (Fig. E22).

(13) Assembly of Pinch arm

Put Pinch arm together and install Opener piece to fix Pinch arm (Fig. E22).

TOP VIEW

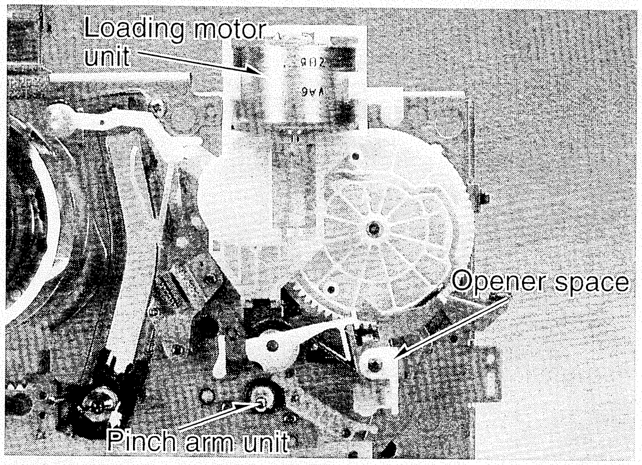

Loading motor unit
Opener space
Pinch arm unit

Fig. E22

4-3. Assembly of mechanism chassis

1. Assembly of Mechanism chassis

(1) Adjust the phase of Position switch in Main C.B.A..

Rotate Position switch until the click point. The projection of Position switch should be set to just above (Fig. F1).

TOP VIEW

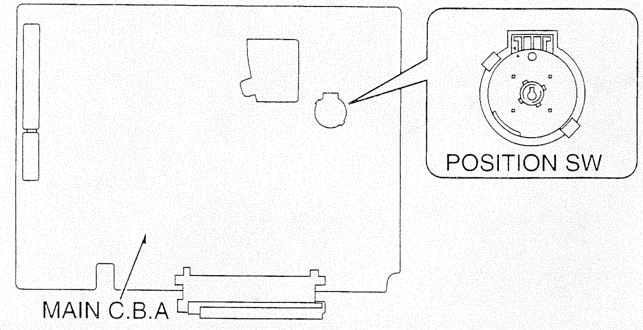

POSITION SW
MAIN C.B.A

Fig. F1

(2) Assembly of Mechanism chassis

Put Mechanism chassis on Main C.B.A. and fix it by 5 screws (3 red screws and 2 gold screws). Connect P3001, P2502 and P4002 (Fig. F2).

TOP VIEW

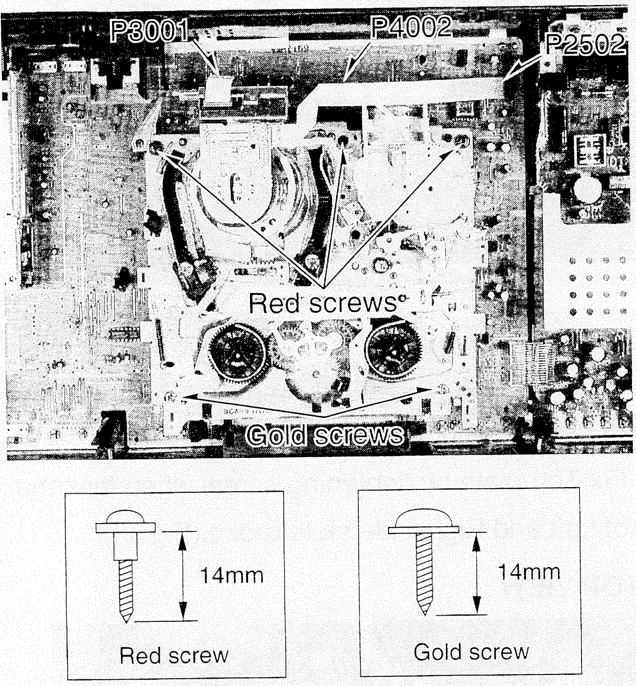

P3001
P4002
P2502
Red screws
Gold screws
14mm
Red screw
14mm
Gold screw

Fig. F2

※ The red screws has a gap among the chassis. Therefore be careful not to tighten too much.

2. Assembly of Cassette holder unit

(1) Assembly of Main shaft

Install Main shaft so that Main shaft fits the groove of Chassis (Fig. F3).

TOP VIEW

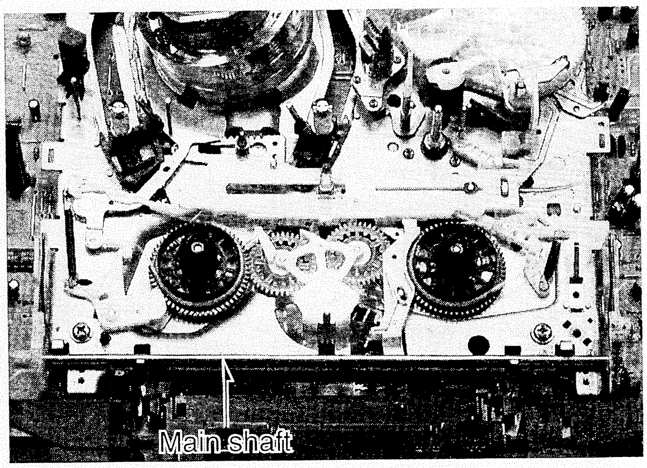


Fig. F3

(2) Assembly of Left & Right side plate

Install Left side plate so that Left side plate fits the groove of Chassis and fix it by the red screws.

After adjustment the phase of waper arm and Drive rack (Fig. F5), install Right side plate so that Right side plate fits the groove of Chassis and fix it by 2 red screws. Hang connection spring on the projection of Drive rack arm (Fig. F4, F5).

TOP VIEW

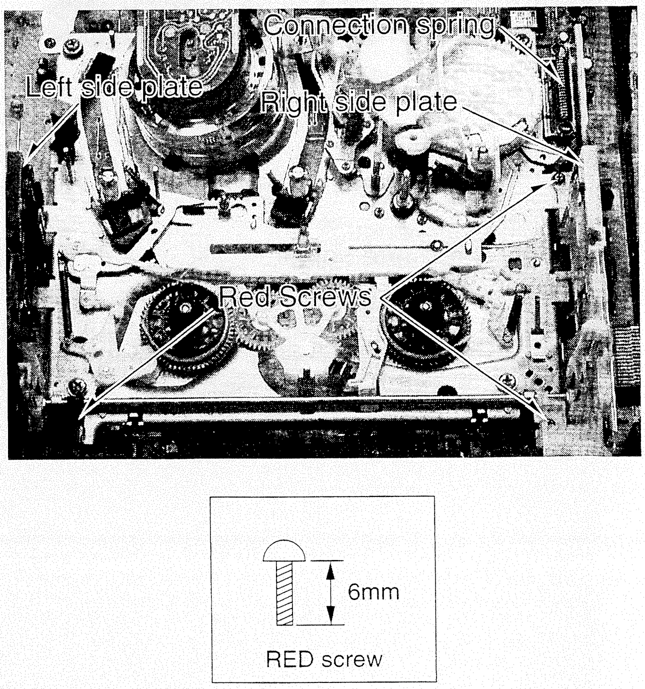
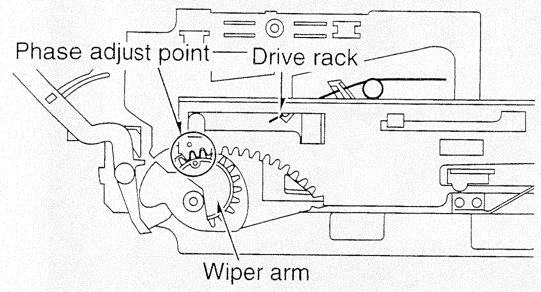

Connection spring
Left side plate
Right side plate
Red Screws
6mm
RED screw

Fig. F4

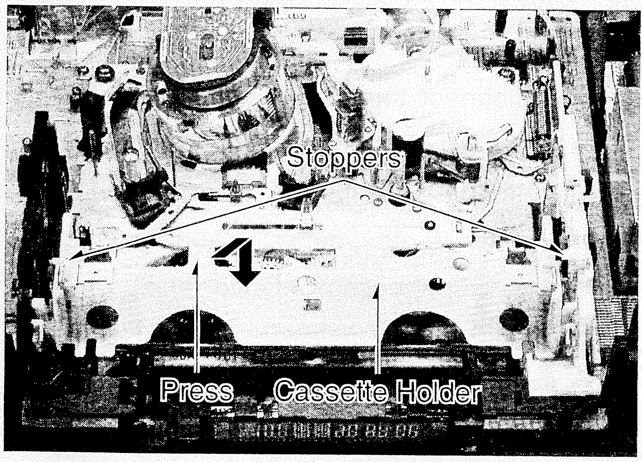
SIDE VIEW



Phase adjust point
Drive rack
Wiper arm

Fig. F5

TOP VIEW



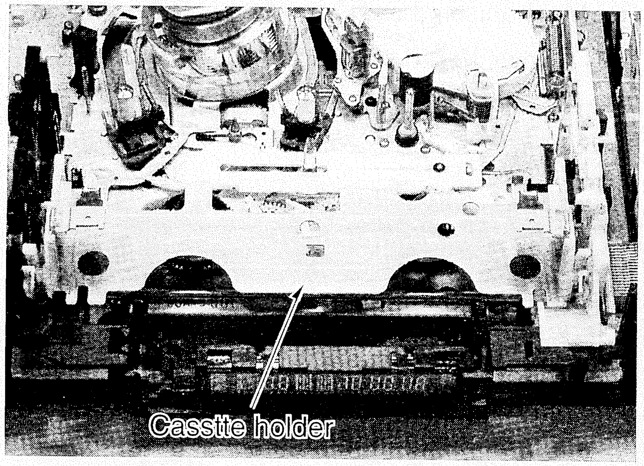
Stoppers
Press
Cassette Holder

Fig. F6

(3) Assembly of Cassette holder

Install Cassette holder so that Cassette holder fits the groove of Waper arm installed in Main shaft (Fig. F6, F7).

TOP VIEW



Cassette holder

Fig. F7

(4) Assembly of Top plate

Install Top plate so that Top plate fits the groove of Left and Right side plate.

※ Fix Top plate by tightening screw when the tabs of Left and Right side plate broke (Fig. F8).

TOP VIEW

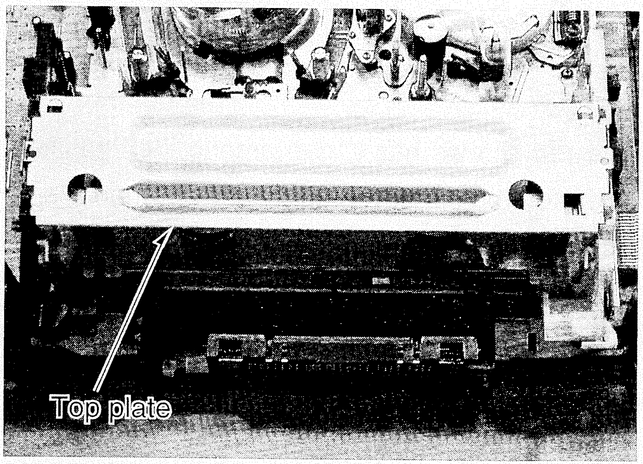
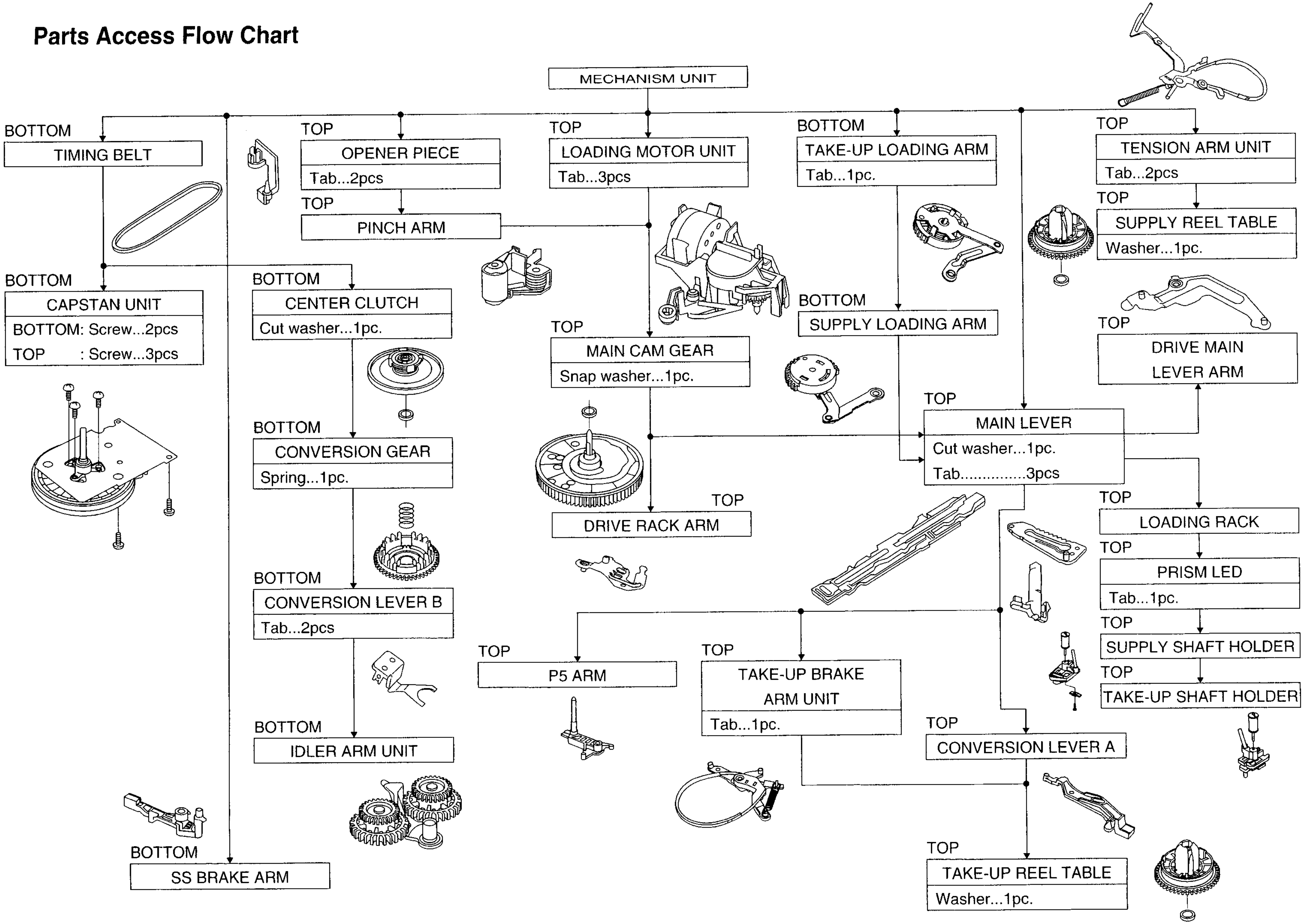


Fig. F8

(5) Install Front panel unit and Top panel

Parts Access Flow Chart


MECHANISM UNIT
BOTTOM
TIMING BELT
BOTTOM
CAPSTAN UNIT
BOTTOM: Screw...2pcs
TOP : Screw...3pcs
TOP
OPENER PIECE
Tab...2pcs
TOP
PINCH ARM
BOTTOM
CENTER CLUTCH
Cut washer...1pc.
BOTTOM
CONVERSION GEAR
Spring...1pc.
BOTTOM
CONVERSION LEVER B
Tab...2pcs
BOTTOM
IDLER ARM UNIT
BOTTOM
SS BRAKE ARM
TOP
LOADING MOTOR UNIT
Tab...3pcs
TOP
MAIN CAM GEAR
Snap washer...1pc.
TOP
DRIVE RACK ARM
TOP
P5 ARM
BOTTOM
TAKE-UP LOADING ARM
Tab...1pc.
BOTTOM
SUPPLY LOADING ARM
TOP
MAIN LEVER
Cut washer...1pc.
Tab...............3pcs
TOP
TAKE-UP BRAKE ARM UNIT
Tab...1pc.
TOP
CONVERSION LEVER A
TOP
TAKE-UP REEL TABLE
Washer...1pc.
TOP
TENSION ARM UNIT
Tab...2pcs
TOP
SUPPLY REEL TABLE
Washer...1pc.
TOP
DRIVE MAIN LEVER ARM
TOP
LOADING RACK
TOP
PRISM LED
Tab...1pc.
TOP
SUPPLY SHAFT HOLDER
TOP
TAKE-UP SHAFT HOLDER

5. MECHANICAL ADJUSTMENT PROCEDURE

5-1. Tension post position adjustment

Equipment required: Hex. Wrench (VFK0326)
Specification: 50.5±1.5 mm

(1) Disconnect the AC plug.
(2) Remove the TOP PLATE.
(3) Turn the LOADING MOTOR until the loading completes.
(4) Adjust the hole of Tension Band Fastener by Hex Wrench until the distance between the Tension Post and the center of Supply reel table is 50.5±1.5 mm as shown in Fig. M1.

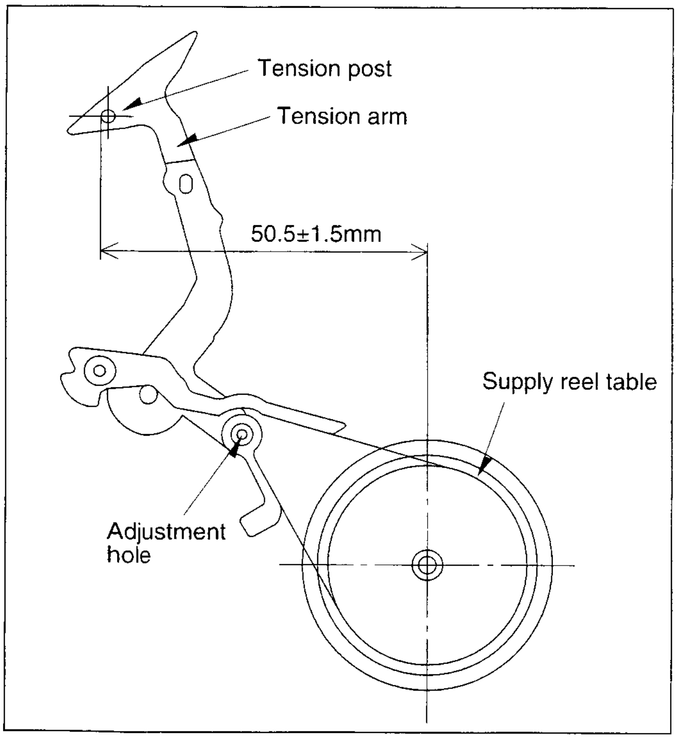

Tension post
Tension arm
50.5±1.5mm
Supply reel table
Adjustment hole

Fig. M1

5-2. Back tension adjustment

Equipment required:
Back Tension Meter (VFK0132)
VHS Cassette tape (180 minutes tape: PAL)
VHS Cassette tape (120 minutes tape: NTSC)
Specification: 22.5–27.5g

(1) Playback the cassette tape from the beginning and wait until the tape movement get the stabilization. (for approx. 10–20 seconds)
(2) Insert the Back Tension Meter into the path of a tape, and measure the back tension to be within specification as shown in Fig. M2.

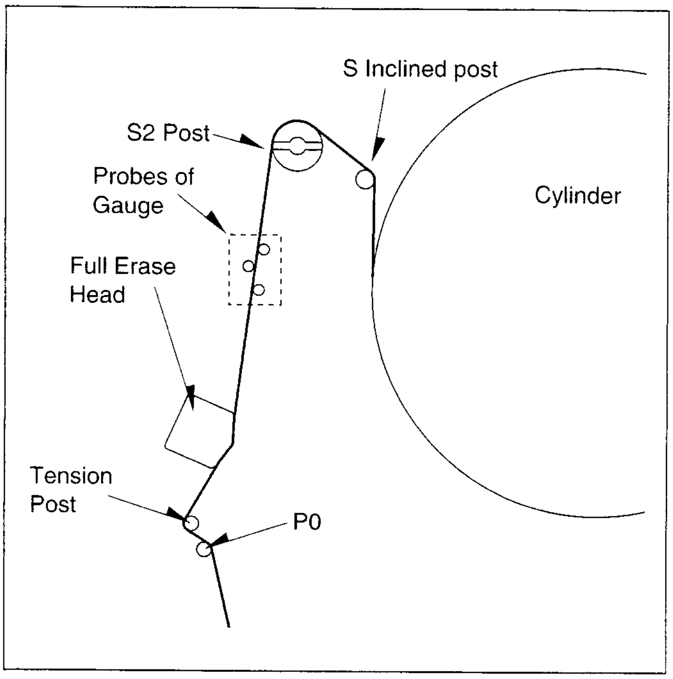

S Inclined post
S2 Post
Probes of Gauge
Cylinder
Full Erase Head
Tension Post
P0

Fig. M2

(3) If it is out of specification, change the spring notch as shown in Fig. M3.

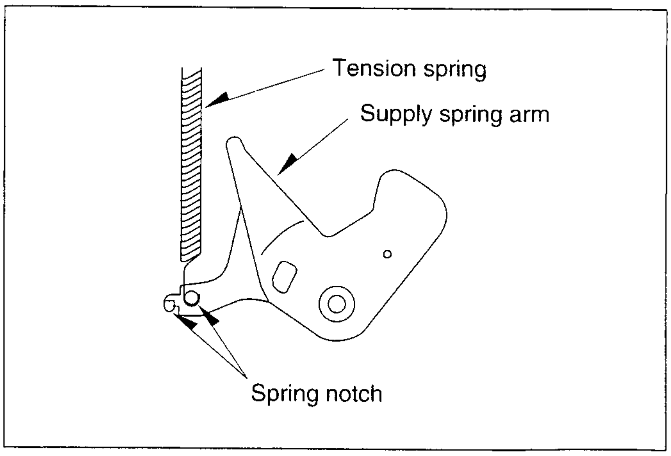

Tension spring
Supply spring arm
Spring notch

Fig. M3

5-3. P2 and P3 posts adjustment (PREADJUSTMENT)

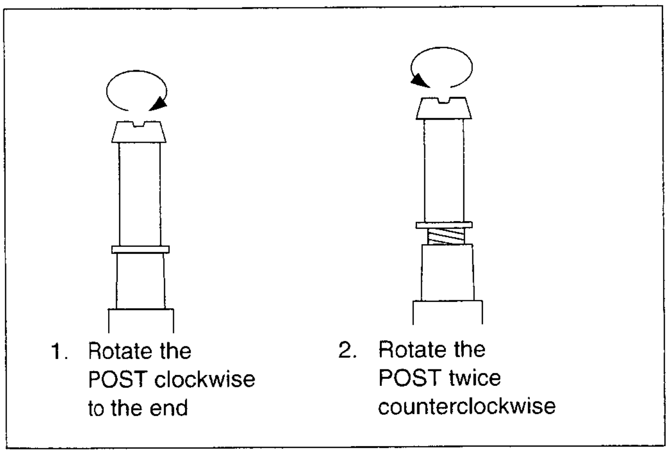
Equipment Required:
Post Adjustment Screwdriver (VFK0329)

(1) Remove the Top Plate.

(2) Turn the Loading Motor until the unloading completes.

(3) Rotate the P2 and P3 Posts clockwise to the end. (Fig. M4)

(4) Rotate the P2 and P3 Posts twice counterclockwise. (Fig. M4)



1. Rotate the POST clockwise to the end

2. Rotate the POST twice counterclockwise

Fig. M4

(5) Playback the cassette tape and make sure that the edges of the tape are not curling at the bottom or top end of the P2, P3, and P4 Posts as shown in Fig. M5.

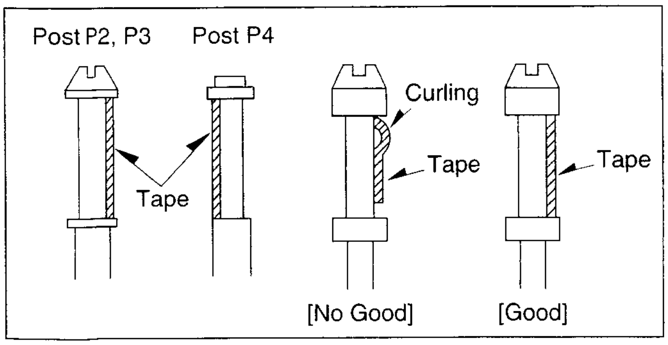


Fig. M5

(6) If the curling appears, readjusts the P2 and P3 Posts.

5-4. Tape interchangeability adjustment

Carry out the following procedures for Tape Interchangeability Adjustment to do it correctly and smoothly.

(1) P2 AND P3 POSTS ADJUSTMENT
(2) ADJUSTMENT OF P4 POST
(3) HEIGHT ADJUSTMENT OF A/C HEAD
(4) FINE-ADJUSTMENT OF A/C HEAD
(5) ADJUSTMENT OF X-VALUE (PREADJUSTMENT)
(6) FINE-ADJUSTMENT OF X-VALUE

If the Tape Interchangeability Adjustment is not perfect, repeat the above procedures from (1) to (6).

CAUTIONS: To make an Adjustment Mode for Tape Interchangeability, press the FF and EJECT buttons simultaneously 3 times to set the Service Mode 2.

In case of VCR mounted shuttle ring, turn the shuttle ring to FF and then press EJECT button.

In Loewe model, STOP button is used instead of FF button.

NOTE: Cleaning the Tape Transport path before adjusting of Tape Interchangeability. The detail portion is shown below.
P0 Post, Tension Posts, FE Head, P2 Post, Supply Inclined Post, Cylinder Unit, Take-up Inclined Post, P3 Post, A/C Head, P4 Post, Pinch Roller, Capstan Shaft, P5 Post. FE Head, Cylinder Unit, A/C Head and Capstan Shaft are more important parts and pay an attention to clean them.

5-4-(1). P2 AND P3 POSTS ADJUSTMENT

Equipment required:
Alignment Tape (PAL/SECAM: VFJ8125H3F)
(NTSC: VFM8080HQFP)
Post Adjustment Screwdriver (VFK0329)

(1) Connect the oscilloscope to the output of the Head Amp as shown in Fig. M6.

NOTE: To get a stable waveform of the Head Amp output (observation point TW3001 and TW2001 located on Main C.B.A.) on the oscilloscope, use the head switching pulse as a triggering signal as shown in Fig. M6.

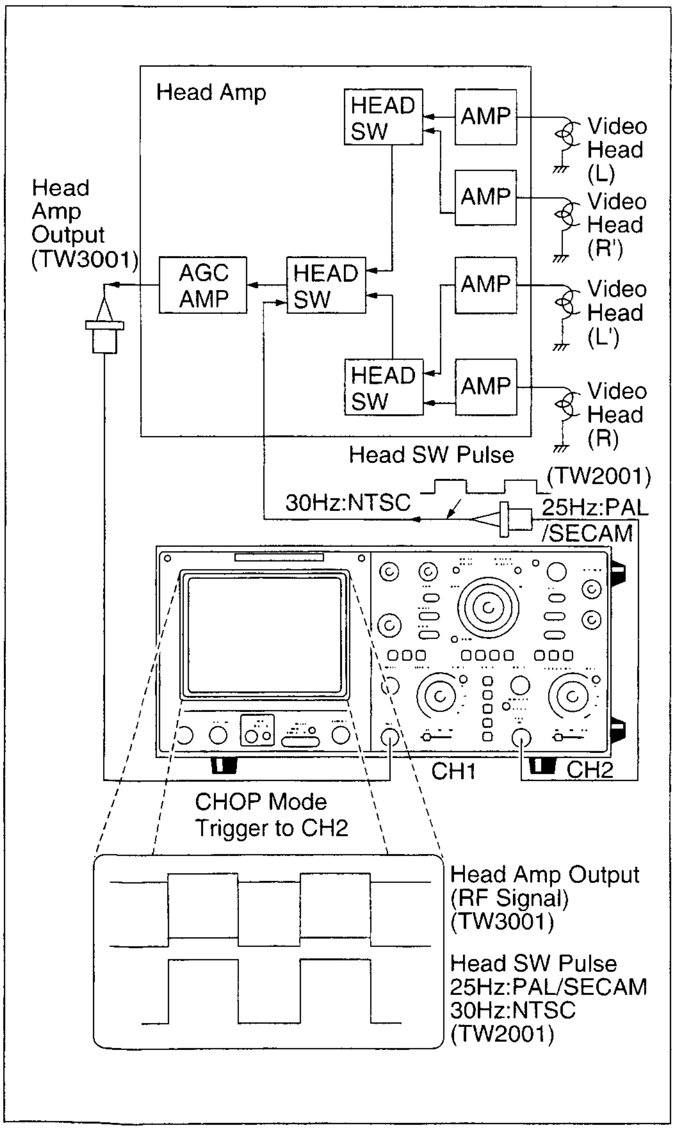

Head Amp
HEAD SW
AMP
Video Head (L)
AMP
Video Head (R')
Head Amp Output (TW3001)
AGC AMP
HEAD SW
AMP
Video Head (L')
HEAD SW
AMP
Video Head (R)
Head SW Pulse
(TW2001)
30Hz:NTSC
25Hz:PAL /SECAM
CH1
CH2
CHOP Mode
Trigger to CH2
Head Amp Output (RF Signal) (TW3001)
Head SW Pulse 25Hz:PAL/SECAM 30Hz:NTSC (TW2001)

Fig. M6 Connect of Oscilloscope

(2) Playback the Alignment Tape.

(3) If the RF envelope appears like example "A" or "B" in Fig. M7, then adjustment of the tape guide post (P2: Entrance) is necessary.

(4) Adjust the tape guide post (P2) with the post adjustment screwdriver so that the RF envelope waveform at the entrance portion becomes flat as shown in Fig. M7 "C".

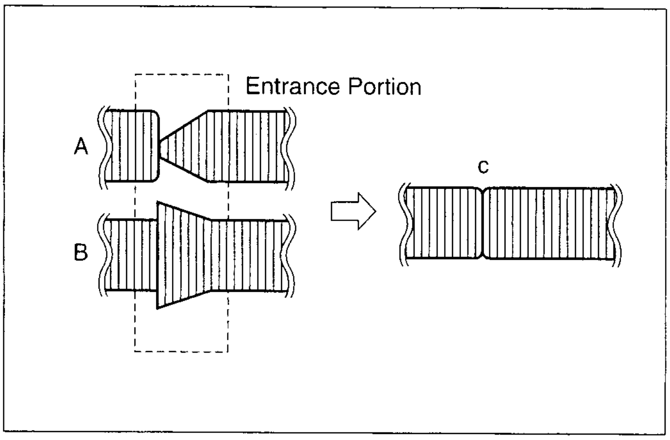

Entrance Portion
A
B
C

Fig. M7

(5) If the RF envelope appears like "D" or "E" in Fig. M8, then adjustment of the tape guide post (P3: Exit) is necessary.

(6) Adjust the tape guide post (P3) in the same manner as the P2 post so that the exit portion becomes flat as shown in Fig. M8 "F".

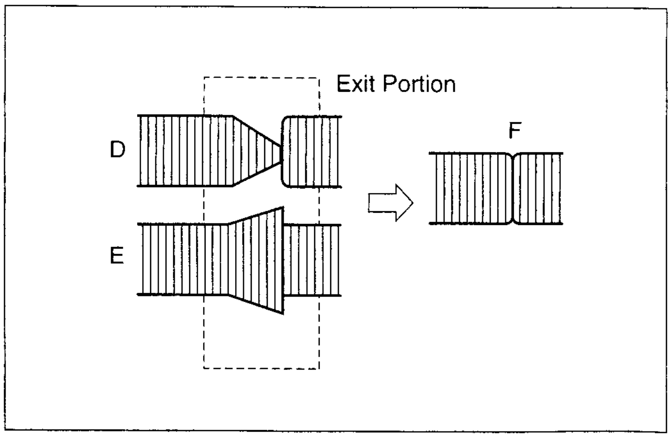

Exit Portion
D
E
F

Fig. M8

(7) Keep pressing the tracking up/down (∧ or ∨) buttons on the remote controller unit. The output envelope should vary nearly parallel with other condition as shown in Fig. M9.

(8) Set the tracking control into center fix position by pressing the tracking up/down (∧ and ∨) simultaneously and adjust for maximum RF envelope, whilst being as flat as possible.

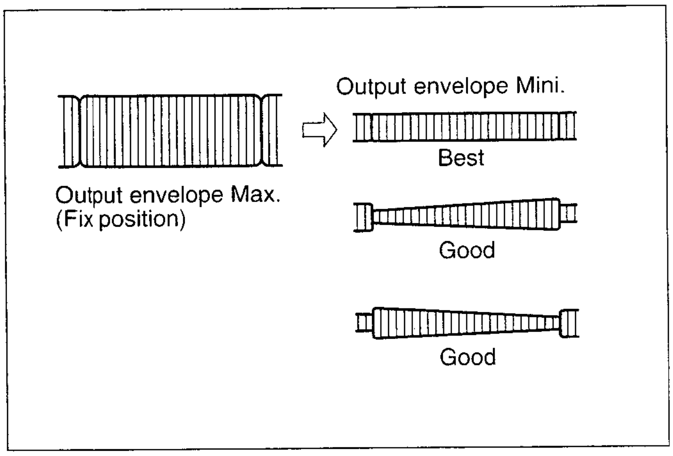


Fig. M9

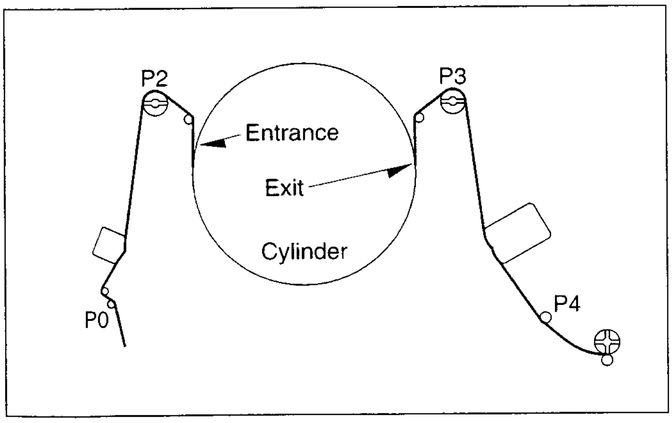


Fig. M10 Loading of Posts

5-4-(2). ADJUSTMENT OF P4 POST

(1) Install A/C Head on the Mechanism Chassis by one screw.

(2) Playback the Alignment Tape.

(3) Rotate the screw (A) or (B) until the wrinkle appears on the lower edge of tape at P4 Post.

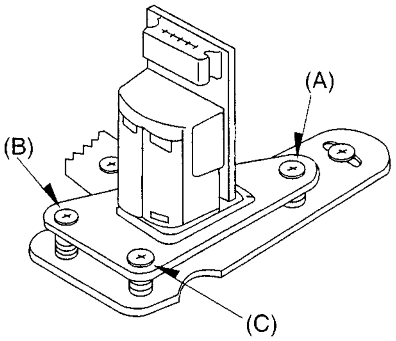
(4) Rotate the screw (A) or (B) until the wrinkle just disappears on the lower edge of tape at P4 Post.

(5) Connect the oscilloscope to audio output terminal.

(6) Rotate the screw (C) until audio signal is maximized.

NOTE: 1. The relation between the rotation direction of screws (A) and (B) and the condition of wrinkle on the lower edge at P4 Post as shown in Fig. M11.

2. Make sure that there is not the inclined wrinkle between P4 Post and Pinch Roller.



	SCREW (A)	SCREW (B)
So wrinkle appears on the lower edge of tape	COUNTER CLOCKWISE	CLOCKWISE
So wrinkle disappears on the lower edge of tape	CLOCKWISE	COUNTER CLOCKWISE

Fig. M11

5-4-(3). HEIGHT ADJUSTMENT OF A/C HEAD

<When moving the A/C Head up>

(1) Rotate the screw (A) counterclockwise until the wrinkle appears on the lower edge of tape at P4 Post.

(2) Rotate the screw (B) counterclockwise until the wrinkle just disappears on the lower edge of tape at P4 post.

(3) Rotate the screw (C) counterclockwise until the audio signal is maximized.

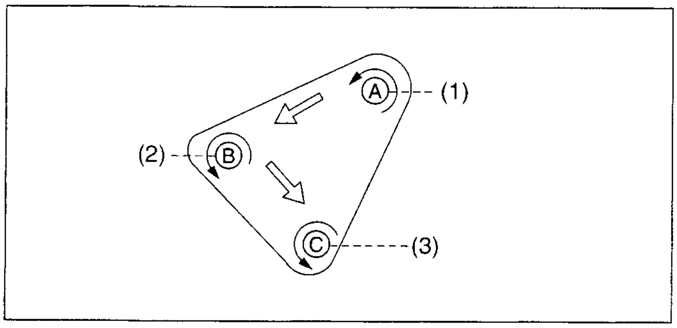


Fig. M12

<When moving the A/C Head down>

(1) Rotate the screw (B) clockwise until the wrinkle appears on the lower edge of tape at P4 Post.

(2) Rotate the screw (A) clockwise until the wrinkle just disappears on the lower edge of tape at P4 post.

(3) Rotate the screw (C) clockwise until the audio signal is maximized.

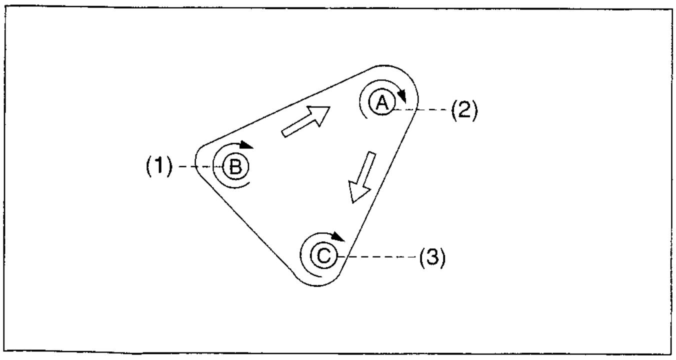


Fig. M13

5-4-(4). FINE-ADJUSTMENT OF A/C HEAD

(1) Connect the oscilloscope to the output of the Head Amp as shown in Fig. M6.

(2) Playback the Alignment Tape.

(3) Make sure that the condition of the wrinkle at P4 Post. If the condition of the wrinkle is out of specification, P4 Post adjustment has to be performed as follows.

Turn the screw (A) counterclockwise until the wrinkle appears on the lower edge of tape at P4 Post.

Turn the screw (A) clockwise until the wrinkle disappears on the lower edge of tape at P4 Post.

(4) Turn the screw (C) until the audio signal is maximized.

NOTE: Make sure that the audio output does not increase when push the upper and lower edges of tape around A/C Head.

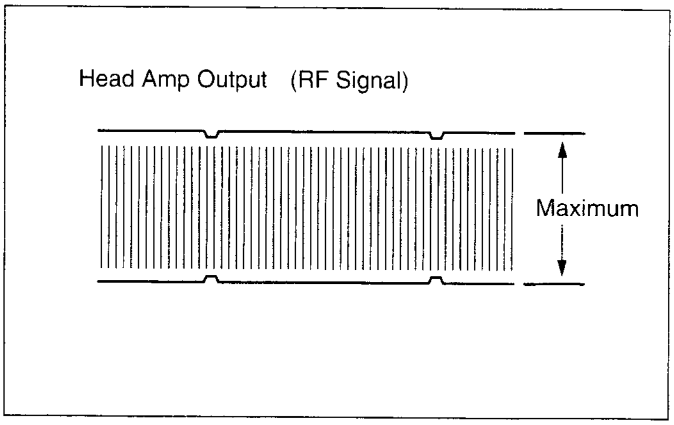


Fig. M14

5-4-(5). ADJUSTMENT OF X-VALUE (PREADJUSTMENT)

Equipment required:
Fine Adjustment Gear Drive (VFK0330)
Specification: Less than 15 msec.

(1) Connect the oscilloscope to the audio output and the video output. Both output signals should be fixed by the external trigger.

(2) Playback the Alignment Tape and set the tracking control into center fix position.

(3) Adjust A/C Head position by the Fine Adjustment Gear Driver (VFK0330) to meet the signal fault portion of the audio output and the video output signals (Less than 15 msec.).

(4) After meeting the signal fault portion, adjust A/C Head position by the Fine Adjustment Gear Driver (VFK0330) until the video envelope is maximized.

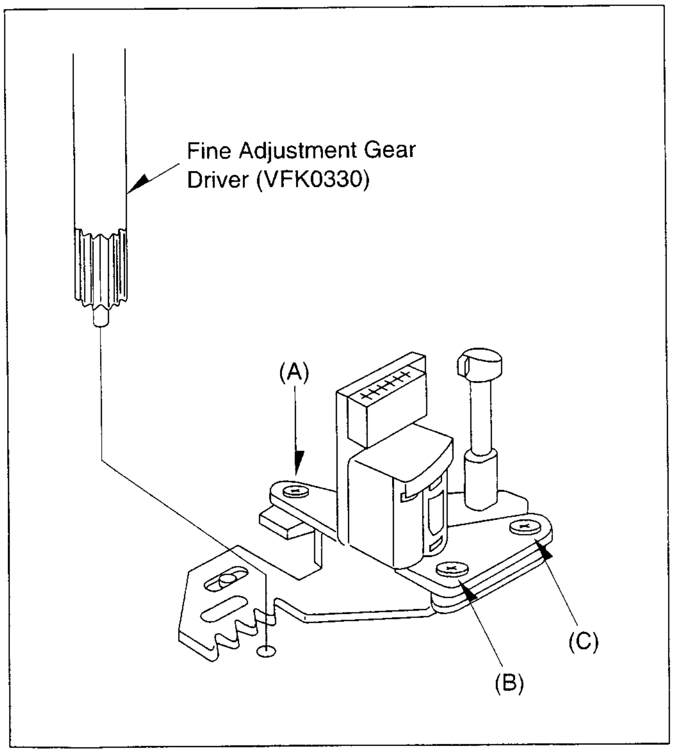


Fig. M15

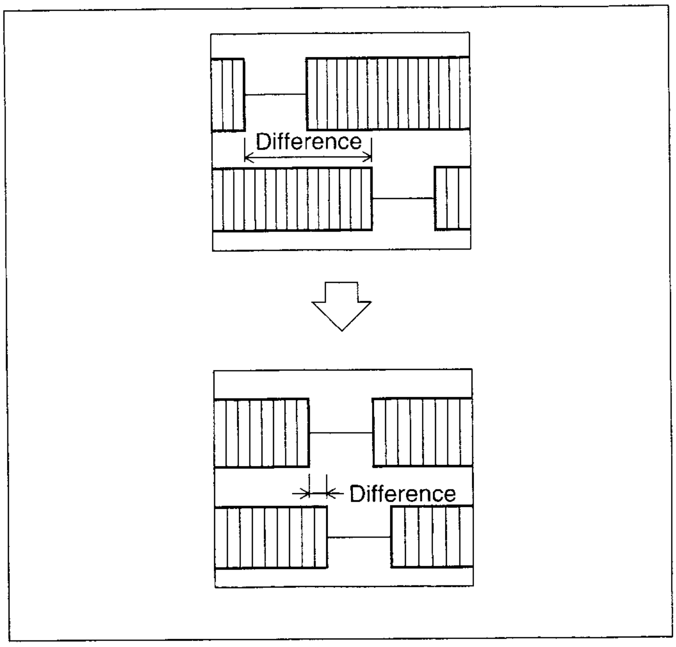


Fig. M16

5-4-(6). FINE-ADJUSTMENT OF X-VALUE

Equipment required:
Fine Adjustment Gear Drive (VFK0330)

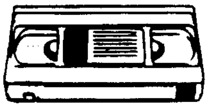
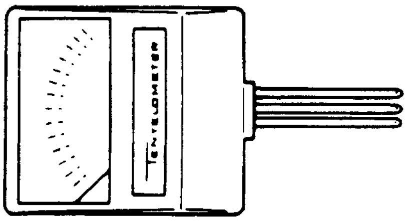
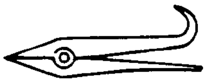
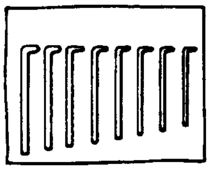
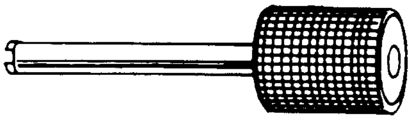
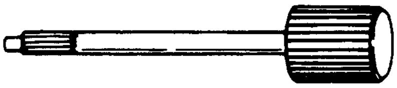
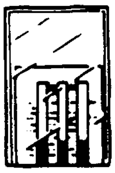
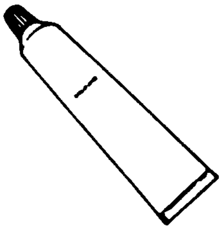
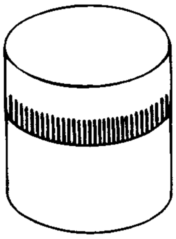
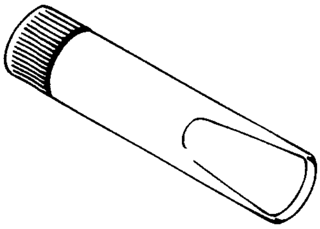
(1) Connect the oscilloscope to the audio output and the video output. Both output signals should be fixed by the external trigger.

(2) Playback the alignment tape and set the tracking control into center fix position.

(3) Adjust A/C Head position by the Fine adjustment Gear Driver (VFK0330) until the video envelope level is maximized at the tracking center fix position.

NOTE: During X-Value Fine Adjustment, in case the video envelope level became 0, Preadjustment of X-value should be adjusted again due to it is possibility to vary the X-value adjustment.

Servicing Fixtures & Tools

VFJ8125H3F PAL VHS Alignment Tape VFM8080HQFP NTSC VHS Alignment Tape 	VFK0132 Back Tension Meter (Tentelometer, Made in U.S.A.) 	VFK0335 Retaining Ring Remover (3mm/4mm) 
VFK0326 Hex. Wrench Set (0.7, 0.9, 1.2, 1.5, 1.6, 2.0, 2.4, 3.0mm) 	VFK0329 Post Adjustment Screwdriver 	VFK0330 Fine Adjustment Gear Driver 
VFK27 Hand Cleaning Stick 	VFK1024 Morlytone Grease 	VFK1298 Floil Grease 
VFK1301 Silicone Grease 		

6. SELF-TEST INDICATION DISPLAY

This VTR has a self-diagnosis and display function. If the VTR detects trouble during installation or during use, one of the following fault indication codes will automatically appear in the VTR display. Fault indication codes are displayed in the form of a single English letter followed by two numbers, as for example "H01".

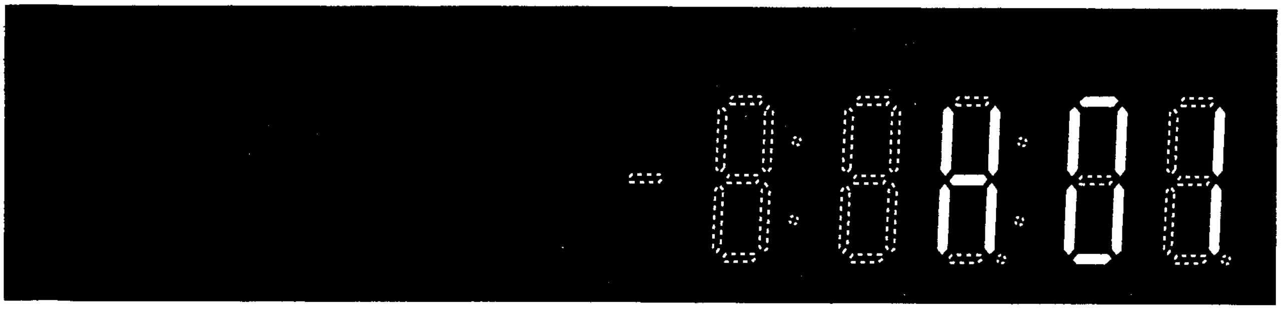
Note:
1. The indication "U" is displayed on the FIP while power remains on.
2. Otherwise, the indication "H" or "F" is displayed on the FIP, and the power is automatically turned off.

   When the power is turned on again, the fault indication code will disappear and the unit will retrun to normal display mode (either clock or counter is displayed).
3. This fault indication code will be stored in the microprocessor even with the AC plug disconnected.

   The two-digit number portion of the stored fault indication code can be redisplayed in the FIP's "second" display portion (the last 2 digits on the light) by placing the unit is Service Mode Number 2 when turning on Service Information Display as for example "01" or "02" etc.

   If a second error occurs, only the most recent error will be displayed and stored.
4. To erase the stored fault indication code data, press FF and EJECT buttons for 5 seconds.

< FIP >



INDICATION	CAUSE	REMEDY/CHECK
U 10	Dew formation.	Wait until the indication disappears.
H 01	After cylinder lock is detected, the cylinder does not start rotating again even after tape unloading.	Check the cylinder unit and the cylinder motor drive circuit.
H 02	Cassette tape is not wound up during tape unloading except Eject mode.	Check the capstan unit and the capstan motor drive circuit.
F 03	Mechanism locks during mode transition except Eject mode.	1. Check the loading motor drive circuit. 2. Check the mechanism phase alignment. 3. Check the mode switch.
F 04	Mechanism locks during tape unloading.	1. Check the loading motor drive circuit. 2. Check the mechanism phase alignment.
F 06	Mechanism locks after tape unloading in Eject mode.	1. Check the loading motor drive circuit. 2. Check the mechanism phase alignment for cassette holder unit.
F 07	During recording mode recording signal is less than the normal condition.	Protection of the overcurrent flowing in transistor which produce the power supply for recording mode.
F 08	Recording circuit works except recording mode.	Check the recording circuit.
H 16	Cylinder lock detection.	Check the cylinder unit and the cylinder motor drive circuit.
H 17	Supply reel mechanism lock detection.	Check the supply reel mechanism and the supply reel circuit.
H 18	Take-up reel mechanism lock detection.	Check the take-up reel mechanism and the take-up reel circuit.

Fig. T1 Self-Test indication Display

7. SERVICE INFORMATION DISPLAY

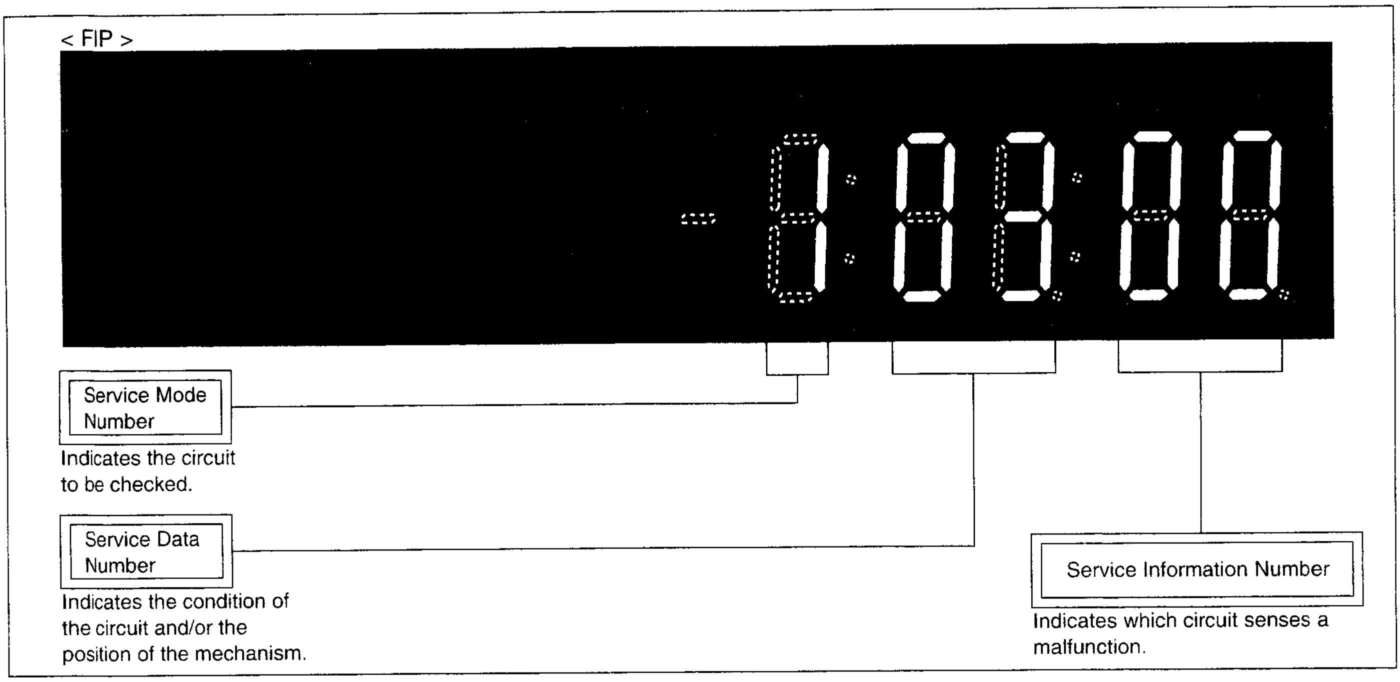

< FIP >
Service Mode Number
Indicates the circuit to be checked.
Service Data Number
Indicates the condition of the circuit and/or the position of the mechanism.
Service Information Number
Indicates which circuit senses a malfunction.

Fig. D1 Service Information Display

7-1. Purpose of Service Information Display

This information aids trouble shooting by indicating the source of the malfunction. The service mode number & service data number are used by the technician during repair while the service information can be used by consumer to diagnose malfunctions allowing the technician to provide a more accurate repair cost estimate and reduce repair time.

7-2. Turning on Service Information Display

Press FF and EJECT buttons simultaneously for more than 3 seconds. In case of VCR mounted shuttle ring, turn the shuttle ring to FF and then press EJECT button for more than 3 seconds.

In Loewe model, STOP button is used instead of FF button.

In the Service Information Display, there are four digits divided into 3 functions.

The first digit indicates which of the 7 service modes that the unit is currently in.

MODE 1: Checks tape protection circuit.
MODE 2: Checks tape transport mechanism.
MODE 3: Checks mode switching operation.
MODE 4: Checks control buttons.
MODE 5: Checks capstan motor.
MODE 6: Checks cylinder motor.
MODE 7: Checks loading/unloading operation.

The second and third digits are service data which indicate the condition of the circuit or mechanism being checked.

The forth digit is the service infromation display. it is to be used by the consumer to help determine the source of a malfunction. The service information display operates independently of the service modes and stores the fault indication in memory for as long as AC power is not supplied.

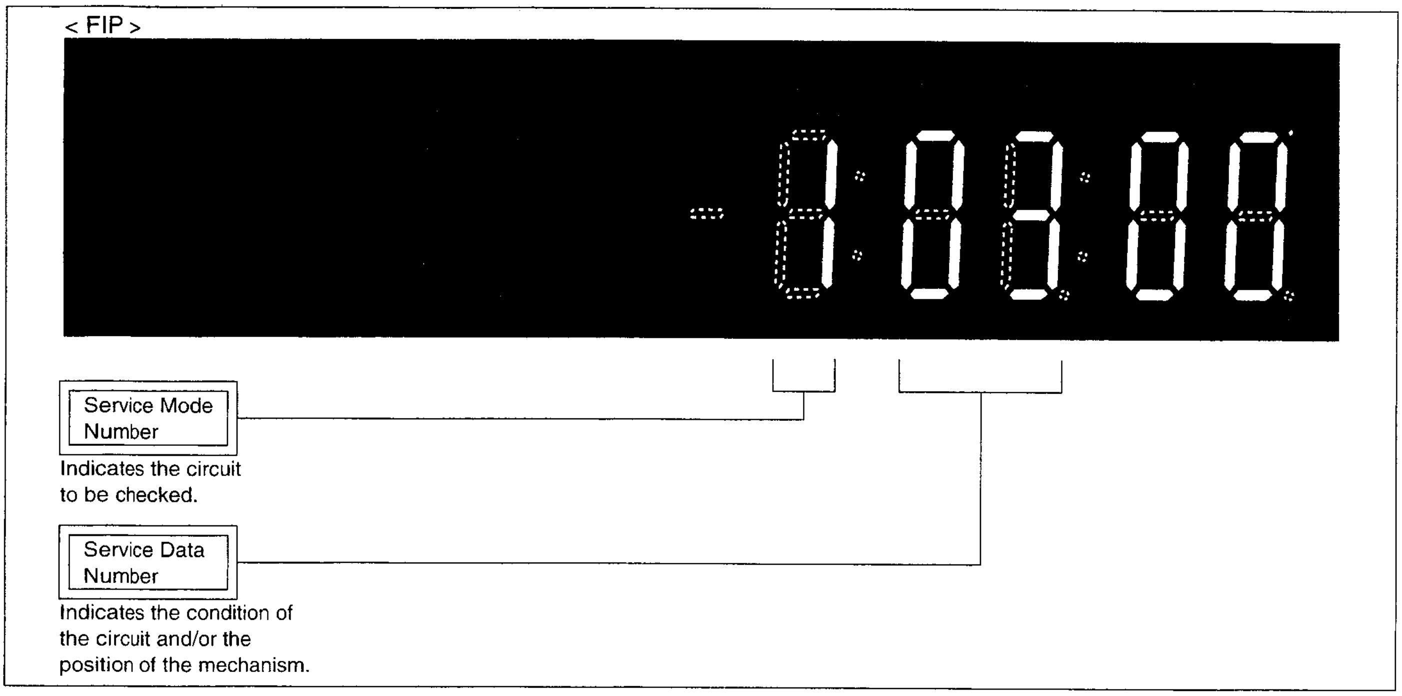

< FIP >
Service Mode Number
Indicates the circuit to be checked.
Service Data Number
Indicates the condition of the circuit and/or the position of the mechanism.

Fig. D2 Service Mode Number and Service Data Number on F.I.P.

7-3. Use of Service Modes

(1) Turn on Service information Display.

(2) To change Service Modes, press FF and EJECT buttons simultaneously.

(3) Mode 0: Storing the process number when the fault happened.

(4) Mode 1: Checks that the sensor LED, Supply & Take-up sensor circuits checks the circuits by blocking the light from the sensor LED to either or both Supply & Take-up Sensors. When the light is blocked to both sensors, "00" should be indicated on the service data number.
When the light is blocked to the supply sensor, "01" should be indicated.

(5) Mode 2: Checks the mode switch circuit while indicating mechanism position.
Service Data Numbers indicate the position of the mode switch and there by the mechanism position.

(6) Mode 3: Checks that mode switch circuit operations have been completed.
Service Data Number should indicate "00" after each mechanism operation is completed.

(7) Mode 4: Checks the operation circuit.

Indicates if SYSTEM CONTROL IC receives the operating commands from the mode buttons and/or remote controller.

(8) Mode 5: Checks the capstan motor circuit.

Indicates if the SYSTEM CONTROL IC has received the command to rotate the capstan motor.

(9) Mode 6: Checks the cylinder motor circuit.

SYSTEM CONTROL IC has received the command to rotate the cylinder motor.

(10) Mode 7: Checks the loading/unloading operation.

The loading motor rotates for loading operation when the "PLAY" button is pressed.

The loading motor rotates for unloading operation when the "STOP" button is pressed.

This mode can be displayed indefinitely until the OPERATE button is pressed.

<NOTE> Refer to Fig. D5 for details of Service Data Numbers.

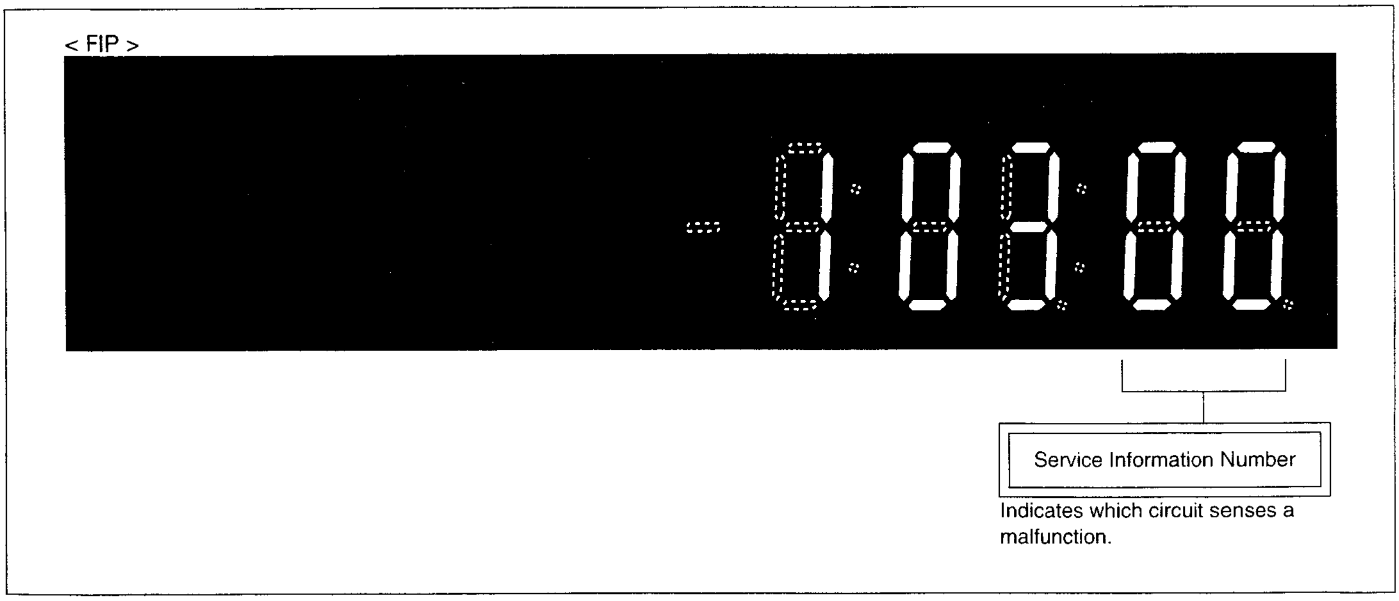

< FIP >
Service Information Number
Indicates which circuit senses a malfunction.

Fig. D3 Service Information Number on F.I.P.

7-4. Service Information Number

Refer to Fig. D4 for details of Service Infromation Number.

NOTE: The Service Information Number display is independent of the service mode display. The Service Information Number will be stored as long as AC power is not supplied. (If can be displayed in the Service Mode 2.)

If a second error occurs, only the most recent error will be displayed.

Service Information Number	Malfunction
00	Normal condition (No problem)
10	Dew formation
01	Cylinder stop
02	Tape reel stop
03	Stop at position other than 04 or 06
04	Stop during unloading
06	Stop during Cassette-in/Eject operation
07	Recording circuit stop in recording mode.
08	Recording circuit stop except recording mode.
16	Cylinder lock
17	Supply reel lock
18	Take-up reel lock
2*	PG shifter automatic adjustment error

Fig. D4 Detail Service Information Number

7-5. Test Mode

When the test terminals are shorted during turning off condition, the following operation will be performed after AC power is applied. Test Mode Information will be displayed on FIP insted of linear counter. To release Test mode, test Terminales should be opened.

(1) Power will be turned on automatically when AC power is applied.

(2) The direct operation of buttons are able to be performed.
(Examle) PLAY⟷REC, REC→EJECT, REC→FF/REW

(3) In case the mechanism is in PLAY position, the mechanism goes into PLAY mode when AC power is applied.

(4) Playback CVC function is turned off.

(5) Tracking is fixed under power off and cassette in. Auto tracking does not perform.

(6) For recording current adjustment.

(7) For reverse slow tracking adjustment.

(8) When the power is turned off, tracking is fixed.

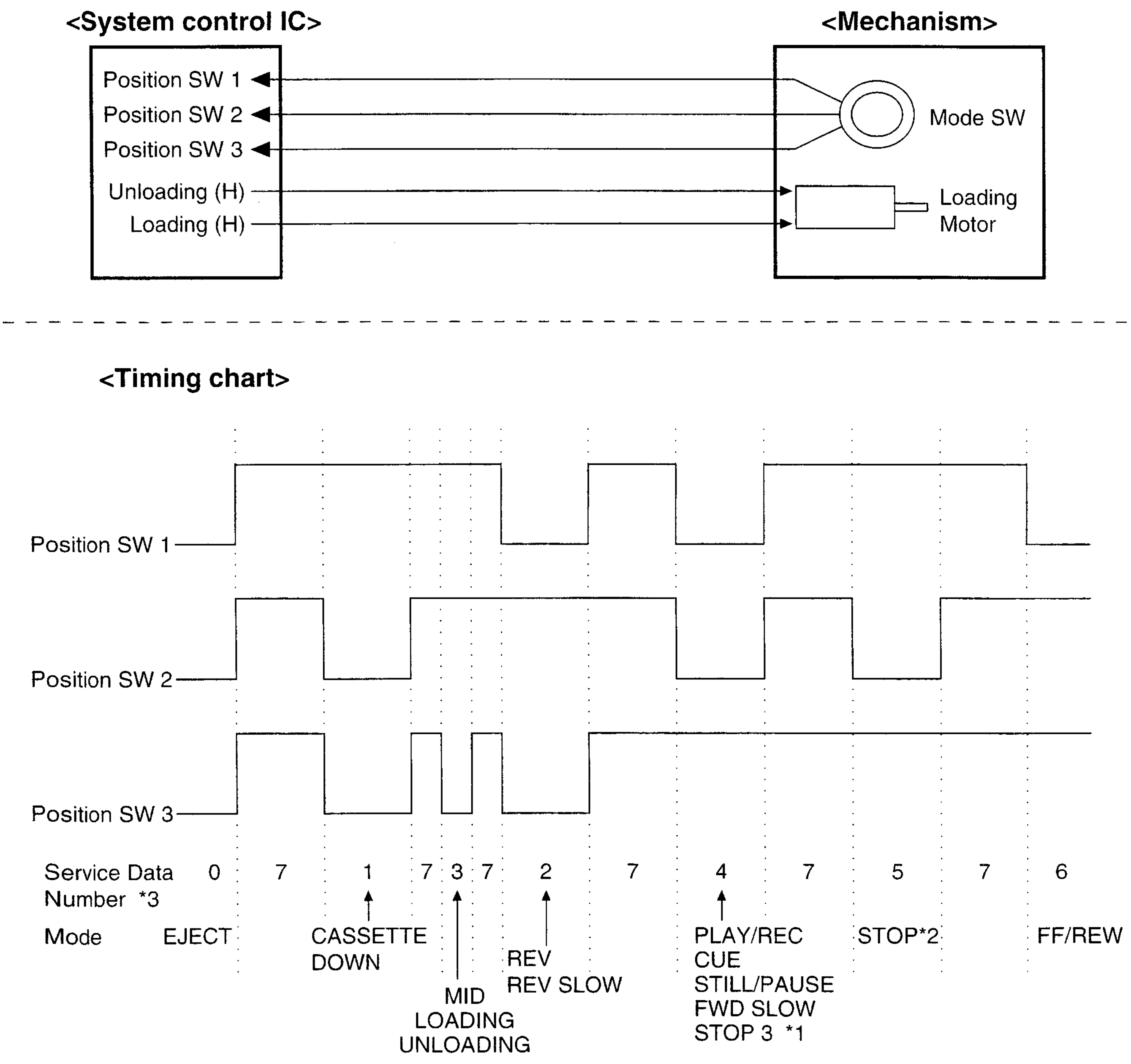
Service Mode Number	Note for checking Service Data Numbers	Service Data Numbers	Indication	Remarks
1	—	00	No light detected at either sensor	Tape not required.
		01	Tape beginning Light to Supply photo sensor is blocked.	
		02	Tape end Light to Take-up photo sensor is blocked.	
		03	Light detected at both sensors.	
2	—	00	EJECT	Tape required *1. STOP3: Pintch roller is on Capstan motor shaft. *2. STOP: Pintch roller is off Capstan motor shaft.
		01	Cassette down	
		02	REV, REV SLOW	
		03	Loading/Unloading	
		04	PLAY, REC, STILL, PAUSE, CUE, FWD SLOW, STOP3*1	
		05	STOP*2	
		06	FF/REW	
		07	Intermediate position	
3	Disregard service data displayed until mechanism operation is completed. Then the display should indicate "00".	00	Any display other than "00" indicates a fault in the mode switch circuit or system.	Tape required.
4	Display only when the operating button is pressed.			Tape not required.
5	Left digit only, disregard Right digit display.	8 1 Left Right Digit Digit	8, 9, u, A, —, n, L and no display indicate that the Capstan motor "PLAY" command received by System control microprocessor.	Tape required. If a symbol other than those listed is displayed, a mulfunction in that circuit is indicated.
	Right digit only, disregard left digit dispaly.	8 7 Left Right Digit Digit	1, 2, 3, 4, 5, 6, 7 indicate that the Capstan motor "CUE, FF, FWD SLOW" commands received by system control microprocessor.	
	Right digit only, disregard left digit display.	8 — Left Right Digit Digit	8, 9, u, A, —, n, L and no display indicate that the Capstan motor "Reverse, REW, Reverse Slow" commands received by system control microprocessor.	
6	Left digit only, disregard Right digit display.	1 0 Left Right Digit Digit	1, 3, 5, 7, 9, A, n and no display indicate that the cylinder motor "ON" command received by system control microprocessor.	Tape required. If a symbol other than those listed is displayed, a mulfunction in that circuit is indicated.

Fig. D5 Service Data Display and Indication

7-6. Timing chart from Mode SW to System control IC

System control IC senses the mechanical position through the Mode SW.

Fig. D6 shows the timing for service mode number 2.


<System control IC>
<Mechanism>
Position SW 1
Position SW 2
Position SW 3
Unloading (H)
Loading (H)
Mode SW
Loading Motor
<Timing chart>
Position SW 1
Position SW 2
Position SW 3
Service Data Number *3
0
7
1
7
3
7
2
7
4
7
5
7
6
Mode
EJECT
CASSETTE DOWN
MID LOADING UNLOADING
REV REV SLOW
PLAY/REC CUE STILL/PAUSE FWD SLOW STOP 3 *1
STOP*2
FF/REW

*1 : Stop 3 ;The Pinch roller is on the Capstan motor shaft.

*2 : Stop ;The Pinch roller is off the Capstan motor shaft.

*3 : Service Data Number; This is for Service Mode Number 2.

Fig. D6 Timing chart of Mode SW

8. SYSTEM CONTROL CIRCUIT & MECHANISM CONTROL CIRCUIT

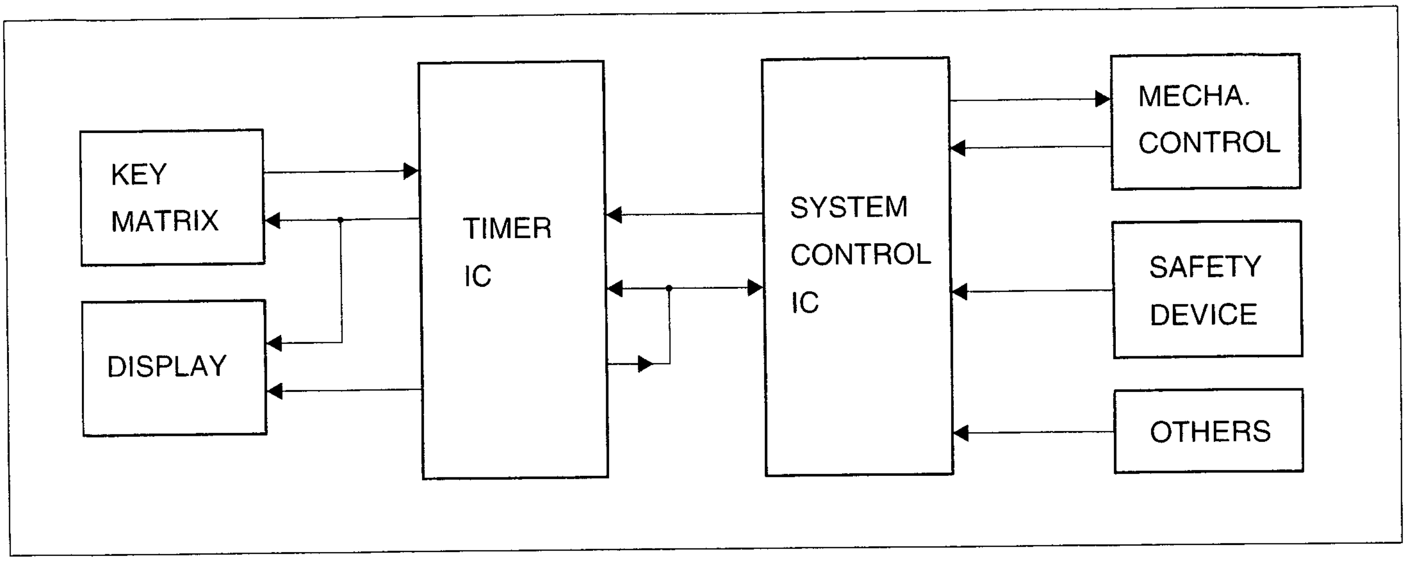


Fig. S1 Overall Block Diagram of System Control Circuit

8-1. STOP3 Specification

(1) The STOP3 is the playback stand-by mode.

(2) The unit is put into the STOP3 position after tape loading if the cassette tape does not have a clear leader tape.

(3) If the unit is in the STOP3 position when the power is switched off (included the Timer stand-by mode), the unit goes to the STOP position.

(4) If the cassette is in the unit when the power is turned on, the unit goes to the STOP3 position.

(5) When the cassette tape has clear leader tape, the unit is in loading mode after winding up the clear leader tape by Take-up reel at the cassette down position and the unit goes to STOP3 position.

8-2. Stand-by in the STOP3 position

(1) The unit goes to STOP3 position when the Stop mode is selected during the Play or Rec operations. The unit then loosens the tape tension by performing the Reverse Slow.

The Reverse Slow corresponds to the FG 40 pulses of the capstan (irrespective of SP/LP modes). The cylinder continues to rotate.

(2) After about 5 minutes in STOP3 mode, the unit shifts to the Stop position and then the unit stops the cylinder rotation.

8-3. Supply and Take-up Sensors

Supply and Take-up photo transistors are used to sense the beginning and end of a tape. The tape has transparent leaders at the beginning and end.

When these transparent leaders enter the tape transport path, they allow infrared light from the sensor LED to reach either one of the tape end sensors (photo-transistor).

If the Take-up end sensor detects the light, the microprocessor SYSTEM CONTROL IC places the VCR in the Stop mode and then performs a short Cue.

If the Supply end sensor is triggered, the microprocessor activates the Stop mode and the Rewind mode. The Rewind mode continues until the Take-up end sensor detects the end of the tape. The tape beginning is detects by a low signal at SYSTEM CONTROL IC Take-up photo terminal. The tape end is detected by a low signal at SYSTEM CONTROL IC Supply photo terminal.

If the light is received at both sensors at same time, the cassette is ejected.

<Operation after detecting the beginning and the end of tape>

Mode	Detection of the beginning	Detection of the end
Power off→on	Short CUE	Short REW
Cassette in	Short CUE	Short REW
Loading	Short CUE	Short REW
FF/CUE	——	Auto REW
REW/REV	Short CUE	——
PLAY, REC	——	Auto REW
Timer REC	——	Power off

Both ends of tape detection (tape cut, no cassette),

(1) Cassette in: The cassette tape is ejected

(2) Other mode: The unit goes to Stop mode and it is impossible to operate except EJECT key.

(3) Timer REC: Power is turned off after short CUE is performed.

8-4. Safety Tab Switch

A recorded video cassette can be protected against accidental erasure by breaking off the tab on the cassette. The cassette can now only be used for playback. To be able to record on the cassette, cover the hole with adhesive tape. If the safety tab on the cassette has been removed, Safety Tab Switch is off (open) and high signal is supplied to SYSTEM CONTROL IC Safety Tab terminal. The SYSTEM CONTROL IC will not go into the recording mode and automatically places the VCR in the playback mode.

8-5. Dew Sensor

If excessive moisture or condensation is present inside the machine (an internal humidity of more than 98%) the unit will stop if running. Until the moisture level decreases only the Eject mode will operate. To sense the humidity, a dew sensor is used. The sensor is a special variable resistor which change resistance with ambient humidity.

The sensor ranges in resistance from about 5K ohm at 90% humidity to about 50K omh at 98% humidity. Normally, the voltage across the sensor is low because of its low resistance.

But if moisture condenses inside the unit, the SYSTEM CONTROL IC voltage of Dew terminal increases to indicate a Dew condition.

Tape	Mode	Dew sensor ON	Dew sensor OFF
OUT	Power	Compulsory Power on	Power off
	Dew indication	Indicate “d” and “U10”	Normal indication
	Cylinder	Rotating *1	Stop
	Key operation	Not possible *2	Possible
	Cassette in	Immediately a cassette is ejected after it goes to cassette down position.	Possible
IN	Power	Compulsory Power on	Power off
	Dew indication	Indication “d” and “U10”	Normal indication
	Cylinder	Rotating *1	Stop
	Key operation	Not possible *2	Possible
	Cassette condition	A cassette goes to down position and is in stand-by mode.	Stand-by mode at STOP3 position.

*1: When the cylinder locks in dew mode, it will be released until dew sensor is truned off.

*2: The keys which do not relate to the tape running operation, are able to be used.

Dew sensor on:	During Dew formation is detected and 80 minutes after completion of Dew detection.
Dew sensor off:	80 minutes later after copmletion of Dew detection.

8-6. Setting time for each mode

The time is set on each mode in order to protect tape and capstan driver. When the setting time is over, the mode is gone to the next mode.

Mode	Setting time	Switching mode
STILL, PAUSE	Approximately 5 minutes	STOP
CUE/REV lock	Approximately 10 minutes	PLAY
SLOW	Approximately 10 minutes	STOP

8-7. Operation of short CUE

Short CUE stops when the Take-up photo sensor detects the black portion of the tape.

However its sensor does not detect the black portion within 4.0±1.0 sec., the mode except Power on/off and Eject modes will be abe to be operated after the unit stops. This is same as the timer over operation of the reel lock.

8-8. Loading/Unloading Mechanism lock

Loading and unloading times are set, and in case the mechanism locks during loading or unloading operation within the defined time, the unit detects the mechanism lock and loading motor reverses or stops.

Loading operation lock:	Cassette tape is unloaded and ejected within 5 seconds.
Unloading operation lock:	Power is truned off within 5 seconds.

8-9. Cassette loading/unloading lock

(1) Mechanism locks during the cassette in operation.

① Cassette tape is ejected approximately 2 seconds later when the mechanism locks during the cassette in operation.

② In case mechanism locks during eject operation, cassette tape is inserted and power is turned off approximately 2 seconds later.

③ When Mechanism locks during cassette in operation, power is turned off approximately 2 seconds.

In case the mechanism lock is released on the way and cassette is ejected, the unit continues the normal operation.

(2) Mechanism locks during the eject operation.

① Cassette tape goes to cassette down position approximately 2 seconds later and power is turned off when mechanism locks during eject operation.

② Mechanism locks during cassette down operation, power is turned off.

8-10. Reel lock operation

When the Suuply or Take-up reel mechanism locks during the tape running, the following operation is performed in order to protect the tape and the capstan driver.

In case of Take-up reel mechanism lock, the detecting time is defined depending on the mechanism position and capstan speed to minimize the tape supplying from supply side.

FF/REW : Unloading and loading. The unit goes to CUE/REV mode.
PLAY/CUE/REV : Unloading till the cassette down position and loading. The unit goes to STOP3 position.

In play and CUE/REV mode, the reel pulse cycle is started to count after the mechanism mode is fixed.

In case the counted pulse cycle exceeds the defined value, the unit goes to STOP mode due to judge that lock of reel mechanism is detected.

<The value of reel lock detection time>

NTSC/SP mode

Mode	Speed (Ratio)	Time (S)
PLAY	±1	3.5
CUE/REV	±2.5	1.6

PAL/SP mode

Mode	Speed (Ratio)	Time (S)
PLAY	±1	3.5
CUE/REV	±2.5	1.6

In FF/REW mode, the unit goes to CUE/REV mode and continues the tape running in the following case.

1. (1) Take-up reel pulse can not be detected within 5 seconds after the unit shifted to REW mode.
   (2) Supply reel pulse can not be detected within 5 seconds after the unit shifted to FF mode.
2. The reel pulse can not be detected more than 2 seconds sequentially within 5 seconds after completing the mechanism mode shift.
3. The reel pulse can not be detected more than 800 msec. past 5 seconds after completing the mechanism mode shift.

8-11. Cylinder lock

<Start rotation>

When the cylinder neither start rotating nor go to the stability rotation within 5 seconds, it is unloading under keeping the mode. In case the cylinder starts rotating and goes to the stability rotation, the mechanism loads again and continues the holding mode.

If it is not possible, Power is turned off and cylinder trouble "H01" is displayed.

<During rotation>

The head switching pulse is supplied to the cylinder when the cylinder starts the stable revolution. In case the head switching pulse does not come to the cylinder within 0.5 seconds, the cylinder lock is judged and the following operation is activated.

Timer REC mode: Power off
PLAY, REC mode: STOP (Mechanism shifts to MID. position and the unit goes to stand-by mode.)

8-12. Mode transition

The relation between the present mode and operation key is shown in the following table.

PRESET MODE	OPERATION KEY							
	P SW	EJECT	STOP	REW	FF	PLAY	PAUSE	REC
P-OFF	P-ON	EJECT	——	——	——	PLAY	——	——
EJECT	P-OFF	——	——	——	——	——	——	——
STOP	P-OFF	EJECT	*3	REW	FF	PLAY	——	REC
REW	P-OFF	EJECT	STOP	REV	FF	PLAY	——	——
FF	P-OFF	EJECT	STOP	REW	CUE	PLAY	——	——
REV	P-OFF	EJECT	STOP	——	*1	PLAY	*2	——
CUE	P-OFF	EJECT	STOP	*1	——	PLAY	*2	——
PLAY	P-OFF	EJECT	STOP	*1	*1	——	*2	——
STILL	P-OFF	EJECT	STOP	*1	*1	PLAY	PLAY	REC PS
REC	P-OFF	——	STOP	——	——	——	REC PS	——
REC/PS	P-OFF	——	STOP	——	——	——	REC	REC

Pressing two keys simultaneously, the key operation is going to be ineffective.

*1: The unit goes to CUE/REV lock mode by pressing FF/REW key lightly (less than 0.7 seconds) during Play, still and REV mode. CUE/REV mode will be returned previous mode when FF/REW key is pressed more than 0.7 seconds.

*2: In case PAUSE key is pressed less than 1 second other than STILL mode, the unit goes to STILL mode.

If PAUSE key is being held to press, the unit goes to STILL mode and then goes to 1/10 SLOW mode after 1 second. SLOW mode has not been set in 2 Head LP mode model.

*3: When STOP key is pressed more than 3 seconds while a cassette tape is in the unit, the cassette tape is ejected.

8-13. Power on reset

When the power is turned on, the unit is going to reset and the following datas are cleared.

(1) Position switch data

(2) Operation mode data

(3) Prohibition flags

In case the mechanism is in cassette down position, tape slack is removed as the initial operation and the unit goes to STOP3 position.

8-14. Linear time counter operation

The counter value will be gone up/down by counting control pulse. As for NTSC system during Play/Rec mode, counter value goes up/down every 30 pulses. As for PAL system during Play/Rec mode, counter value goes up/down every 25 pulses.

8-10. Reel lock operation

When the Suuply or Take-up reel mechanism locks during the tape running, the following operation is performed in order to protect the tape and the capstan driver.

In case of Take-up reel mechanism lock, the detecting time is defined depending on the mechanism position and capstan speed to minimize the tape supplying from supply side.

FF/REW	:	Unloading and loading. The unit goes to CUE/REV mode.
PLAY/CUE/REV	:	Unloading till the cassette down position and loading. The unit goes to STOP3 position.

In play and CUE/REV mode, the reel pulse cycle is started to count after the mechanism mode is fixed.

In case the counted pulse cycle exceeds the defined value, the unit goes to STOP mode due to judge that lock of reel mechanism is detected.

<The value of reel lock detection time>

NTSC/SP mode

Mode	Speed (Ratio)	Time (S)
PLAY	±1	3.5
CUE/REV	±2.5	1.6

PAL/SP mode

Mode	Speed (Ratio)	Time (S)
PLAY	±1	3.5
CUE/REV	±2.5	1.6

In FF/REW mode, the unit goes to CUE/REV mode and continues the tape running in the following case.

1. (1) Take-up reel pulse can not be detected within 5 seconds after the unit shifted to REW mode.
   (2) Supply reel pulse can not be detected within 5 seconds after the unit shifted to FF mode.
2. The reel pulse can not be detected more than 2 seconds sequentially within 5 seconds after completing the mechanism mode shift.
3. The reel pulse can not be detected more than 800 msec. past 5 seconds after completing the mechanism mode shift.

8-11. Cylinder lock

<Start rotation>

When the cylinder neither start rotating nor go to the stability rotation within 5 seconds, it is unloading under keeping the mode. In case the cylinder starts rotating and goes to the stability rotation, the mechanism loads again and continues the holding mode.

If it is not possible, Power is turned off and cylinder trouble “H01” is displayed.

<During rotation>

The head switching pulse is supplied to the cylinder when the cylinder starts the stable revolution. In case the head switching pulse does not come to the cylinder within 0.5 seconds, the cylinder lock is judged and the following operation is activated.

Timer REC mode: Power off

PLAY, REC mode: STOP (Mechanism shifts to MID. position and the unit goes to stand-by mode.)

8-12. Mode transition

The relation between the present mode and operation key is shown in the following table.

PRESET MODE	OPERATION KEY							
	P SW	EJECT	STOP	REW	FF	PLAY	PAUSE	REC
P-OFF	P-ON	EJECT	——	——	——	PLAY	——	——
EJECT	P-OFF	——	——	——	——	——	——	——
STOP	P-OFF	EJECT	*3	REW	FF	PLAY	——	REC
REW	P-OFF	EJECT	STOP	REV	FF	PLAY	——	——
FF	P-OFF	EJECT	STOP	REW	CUE	PLAY	——	——
REV	P-OFF	EJECT	STOP	——	*1	PLAY	*2	——
CUE	P-OFF	EJECT	STOP	*1	——	PLAY	*2	——
PLAY	P-OFF	EJECT	STOP	*1	*1	——	*2	——
STILL	P-OFF	EJECT	STOP	*1	*1	PLAY	PLAY	REC PS
REC	P-OFF	——	STOP	——	——	——	REC PS	——
REC/PS	P-OFF	——	STOP	——	——	——	REC	REC

Pressing two keys simultaneously, the key operation is going to be ineffective.

*1: The unit goes to CUE/REV lock mode by pressing FF/REW key lightly (less than 0.7 seconds) during Play, still and REV mode. CUE/REV mode will be returned previous mode when FF/REW key is pressed more than 0.7 seconds.

*2: In case PAUSE key is pressed less than 1 second other than STILL mode, the unit goes to STILL mode.
If PAUSE key is being held to press, the unit goes to STILL mode and then goes to 1/10 SLOW mode after 1 second. SLOW mode has not been set in 2 Head LP mode model.

*3: When STOP key is pressed more than 3 seconds while a cassette tape is in the unit, the cassette tape is ejected.

8-13. Power on reset

When the power is turned on, the unit is going to reset and the following datas are cleared.

(1) Position switch data
(2) Operation mode data
(3) Prohibition flags

In case the mechanism is in cassette down position, tape slack is removed as the initial operation and the unit goes to STOP3 position.

8-14. Linear time counter operation

The counter value will be gone up/down by counting control pulse. As for NTSC system during Play/Rec mode, counter value goes up/down every 30 pulses. As for PAL system during Play/Rec mode, counter value goes up/down every 25 pulses.

8-15. Tape speed in CUE/REV mode

	CUE/REV mode		Hyper-search mode	
MODE	NTSC	PAL	NTSC	PAL
SP mode	9 times	11 times	9 times	11 times
EP or LP mode	11 times	11 times	29 times	19 times

8-16. Automatic functions

(1) Automatic Power on

① Under power off, when a cassette tape is inserted, power is turned on automatically and cassette tape is loaded.

② Under power off and a cassette tape has been inserted, when PLAY key is pressed, power is turned on automatically and goes to PLAY mode.

(2) Automatic play

When a cassette tape removed safety tab is inserted, the mode goes into Play mode.

(3) Automatic rewind

When tape running is reached to the end of tape, automatically goes to Rew mode and stops when tape running will be reached to the beginning of tape.

In case of Timer recording, short Rew is performed for 2 seconds and power is turned off when tape running is reached to the end of tape.

(4) Power off and Eject

Under power off and a cassette tape has been inserted, when Eject key is pressed, a cassette tape is ejected and power is turned off.

8-17. CUE/REV lock mode

When FF/REW key is pressed lightly (less than 0.7 seconds) during Play, STILL and REV mode, unit goes into CUE/REV mode. To release CUE/REV mode, FF/REW key should be pressed more than 0.7 seconds.

8-18. Hyper-search mode

When FF/REW key is pressed during FF/REW mode, unit goes into CUE/REV mode.

This mode is activated while keeping FF/REW key pressed.

When releasing FF/REW key pressed, this mode is released.

8-19. FF/REW speed

Maximum tape speed is approximately 4.5 m/s during the stable running.

8-20. FF/REW time

The tape running from the beginning to the end of T-120 type (E-180 type) cassette tape is able to be completed within 90 seconds.

Order No. VRD9710036S3

Service Manual

Supplement

Video Product

Effective from : Running Change

Model No. All Z mechanism

Subject : Change of Mechanism Parts

Please use this service manual together with the service manual for Order No.
Model No. All Z mechanism

INTERCHANGEABILITY CODE See the I/C column on the following Part Number List

A	Parts	Production	B	Parts	Production	C	Parts	Production	D	Parts	Production	E	Addition
	Original	Early		Original	Early		Original	Early		Original	Early	F	Deletion
	New	Late		New	Late		New	Late		New	Late	G	Other

Parts Number List

Ref No.	Original Part No.	New Part No.	Part Name & Description	I/C	Remarks
19 (1)	VED0363	VED0412	A/C HEAD UNIT	B	
49 (1)	VXL2737	VXL2733	SUPPLY BRAKE ARM UNIT	G	

⚠ WARNING

This service information is designed for experienced repair technicians only and is not designed for use by the general public. It does not contain warnings or cautions to advise non-technical individuals of potential dangers in attempting to service a product. Products powered by electricity should be serviced or repaired only by experienced professional technicians. Any attempt to service or repair the product or products dealt with in this service information by anyone else could result in serious injury or death.

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Order No. VRD9802006S3

Service Manual

Supplement

Effective from : First Production

Video Product

Model No.
ALL Z Mechanism

Subject : Revision of Service Manual

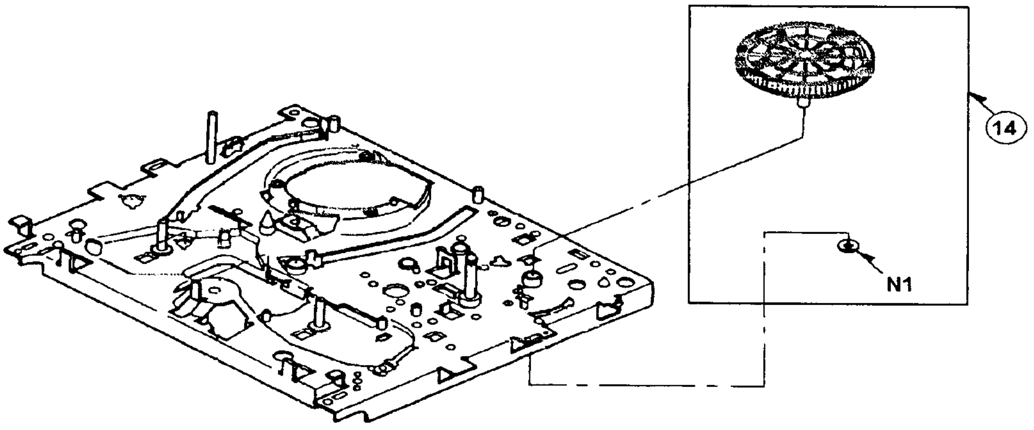
Please use this service manual together with the service manual for Order No.
Model No. All Z Mechanism

INTERCHANGEABILITY CODE							See the I/C column on the following Part Number List		
	Parts Production		Parts Production		Parts Production		Parts Production	E	Addition
A	Original → Early New → Late	B	Original → Early New → Late	C	Original Early New → Late	D	Original → Early New → Late	F	Deletion
								G	Other

Parts Number List

Ref No.	Original Part No.	New Part No.	Part Name & Description	I/C	Remarks
14 (1)	VDG1220	VDG1220KIT	MAIN CAM GEAR KIT	G	

MAIN CAM GEAR KIT (VDG1220KIT) contains MAIN CAM GEAR (VDG1220) and PUSH NUT (VHN0311) as shown in below.



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